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ABSTRACT

A study was undertaken at Gateway Technical Institute (GTI) to determine the perceptions of GTI faculty and staff and of members of the local business and industrial community with regard to how GTI could best utilize its resources in the face of declining enrollments. The study involved a survey of the 215 full-time faculty and staff of GTI and another survey of a stratified sample of 100 area businesses and industries with more than 50 employees. Faculty and staff were asked to supply information about their sex, age, department, years of teaching experience, degrees, participation in professional development, and the programs which they felt should be eliminated. Additionally, they were asked to indicate their degree of agreement with 12 statements about ways of maintaining the quality of educational programs and to rank the importance of five ways to deal with declining enrollments. The business and industry survey solicited information on firm activities, number of employees, company training efforts, other sources of in-service employee training, and the ways GTI could improve their training programs. The study report analyzes the survey findings and presents summary conclusions and recommendations. A review of the literature concerning shifting or declining enrollments is provided, as well as the questionnaires and a bibliography. (JP)

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SHIFTS IN STUDENT ENROLLMENTS AND THEIR EFFECTS ON THE INSTITUTIONAL MANAGEMENT OF GATEWAY TECHNICAL INSTITUTE

NICHOLAS J. COVELLI

NOVA UNIVERSITY
1979

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Gateway Technical Institute

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Shifts in Student Enrollments and Their Effects on the Institutional Management of Gateway Technical Institute

NICHOLAS J. COVELLI

A MAJOR APPLIED RESEARCH PROJECT
PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF EDUCATION

NOVA UNIVERSITY

1979

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When a project of this magnitude is pursued, it touches the personal lives and professional skills of many people.

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Abstract of a Major Applied Research Project Presented to Nova University in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

SHIFTS IN STUDENT ENROLLMENTS AND THEIR EFFECTS ON THE INSTITUTIONAL MANAGEMENT OF GATEWAY TECHNICAL INSTITUTE

By

Nicholas J. Covelli

October, 1979

Gateway has experienced a shift in student population from a decline in full-time students to an increase in the part-time student enrollments which affects the faculty and staff assignments, facility utilization, and reduced revenue derived. The purpose of the study was: to identify the effects declining or shifting enrollments had on the institutional management of resources; and to develop recommendations to reduce the impact on these resources.

The major objectives were to collect existing data and information for determining the extent and impact of declining enrollments; identify potential student target groups for recruitment; determine faculty and staff professional development; determine from business and industry how Gateway could serve their manpower needs; and develop recommendations to reduce the impact of shifting or declining student enrollments on the resources.

The study was limited to Gateway Technical Institute operations, full-time faculty and staff, and business and industries geographically located within the Gateway District. The procedures developed determined the faculty, staff, and business and industry perceptions of how Gateway utilized its resources during a shifting or declining enrollments. Surveys were conducted of Gateway personnel and the business and industry constituency about methods or alternatives in effectively handling future enrollment changes. The validity and reliability of both survey instruments were subjected to review by a panel of experts and a field test sample.

The data from the Faculty and Staff Survey was used to develop a profile of the respondents; an analysis of variance between faculty and staff respondents to the statement: 'GTI should perform the following items in order to maintain the high quality educational programs."; ranking of employment options; and their reaction to the treatment of resources. The data from the Business and Industry Survey provided a profile of the respondents; summarized frequency count and percentage of responses to company training effort, type of source of training for employees, training incentives; and more effective aid to their training effort. Concise questions were asked to derive future work force change and their assessment of job skills/training level of entering employees.

The results indicate a significant decline in the number of high school graduates available for postsecondary education. Future enrollment levels will be based upon the recruitment efforts to attract a greater percentage of the declining high school graduates or more part-time students. Methods to attract the part-time student will require credit for experience or nonformal study, programming over a five- or six-year period of time and refresher and remedial educational services.

The establishment of a Faculty Advisory System and Early Warning System is recommended for better student transition and retention in programs. Faculty and staff want involvement in the recruitment of students, and if reduction in force is necessary, full-time assignments should be retained. In-service training for faculty and staff should involve topics on: humanizing education; teaching handicap or lower level/limited ability students; and develop student attitude toward "work ethic" and "employer expectations".

The Business and Industry Survey determined an extensive on-the-job training effort taking place. Companies would like Gateway to offer supervisory training, technician training, and job upgrading. Companies provide release time from the job for employees to train, but employees make limited use of their tuition reimbursement plan.

Recommendations from the study were: develop a credit course for processing advance standing; establish a District Recruitment Committee; review student entrance assessment testing; develop a Faculty Advisory System and Early Warning System for student retention; develop an Early Retirement Plan; faculty updating of related work experience; a cooperative articulation plan with business/industry; utilization of lab assistants; and a spending level for instructional equipment purchases.

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CHAPTER I

INTRODUCTION

For the past century, postsecondary education in the United States has experienced relatively steady and certain growth in enrollment. For the prior two centuries, growth was not always so steady but it was, by many, considered certain. After two decades of remarkable growth, the community colleges of the nation grew from 845,000 enrollments in 1963, to 3,883,000 enrollments in 1976 (National Center for Educational Statistics, 1978:24). This period of rapid expansion is ending, and the colleges are now facing an era of stabilization and evaluation (Johnston, 1977:59). Now for the first time in our nation's history, the prospect is that enrollments may be both unsteady and uncertain during the remainder of this century.

This is a dramatic, even traumatic, change of conditions. Educational administrators that are facing this dilemma must also contend with increased operational costs, state budget restrictions, public apprehension and resistance to finance education, and intense competition among institutions in recruiting potential students. It has been noted that the management of decline is a different and more exacting task than creative leadership in a period of expansion. It demands different managerial skills and a

different approach to administration than two-year college administrators have used in the past. If the postsecondary institution is to survive these years and provide quality educational programs, then wise utilization of faculty and staff, recruitment of students, and budget resources is imperative (Alfred, 1978:85-94).

Background

An examination of the two decades of growth would show that during the 1960's the predominant theme in community college education was quantitative growth--development of new programs, services, and physical expansion of facilities to serve a rapidly expanding student clientele. Two-year colleges gained credibility as comprehensive institutions capable of offering programs and services where none existed before. Resources were plentiful, and staffs were added in unprecedented numbers to build new programs and shore up existing ones. The size of the budget was not a critical issue because unallocated funds were always available to support a new program or to cover an unanticipated situation. As a result, community college faculty and administrators came to believe that all emerging needs could be met by constantly expanding financial resources.

The view in 1978 is greatly altered. The public at large is debating the question of over-investment in community college education, enrollment contraction, prospective staff surpluses, budget reductions, students

inadequately prepared for work and further education, and declining rates of institutional productivity. Faculty and administrators debate the question of demographic changes in the student population, priorities in spending, and investment and allocation strategies to obtain maximum utilization out of the limited resources (Alfred, 1978:85-93).

Both of these perceptions--that of the 1960's and that of 1978--involve concern about the philosophy and mission of the community college. Should it attempt to become "all things to all people" as in the growth years of the 1960's, or should it concentrate on doing well the things that it does best and avoid getting into areas not central to its mission? Although there is no easy answer to this question, clearly the two-year colleges must somehow reorder their priorities if they are to survive the challenge of reduction.

What are institutions doing and what can they do to determine their own fates? In an era of already declining enrollments and a dwindling supply of "college age" young people, colleges and universities are increasingly turning to marketing techniques successfully employed in the commercial private sector. Marketing is defined as a set of activities including product planning, pricing, promotion, and distribution which are directed at satisfying needs and wants through the exchange process. Many institutions have altered their "product" to appeal to different segments of

the market. For example, evening programs aimed at older adults are flourishing, and "weekend college" programs for older housewives and women who have been unable to attend college in the traditional manner. The other marketing mix elements--promotion, pricing, and channels of distribution--are also receiving greater attention by college administrators (McGarrity, 1978:249-250).

In a Carnegie Commission on Higher Education Report, More Than Survival (1975:6) some institutions are:

> Exploring new markets for students. Many institutions are now pinning their hopes on more adults; but it usually takes several adults, who tend to be part-time students, to equal one full-time student, and there are many noncollegiate competitors for adult time. But there are other markets too.
>
> The importance of a sense of mission, an identity, a separate character; and thus of self-analysis and the development of a coherent strategy.
>
> The ability and the desire to compete for funds and for students.
>
> The search for greater productivity as compared with the cost pass-through practices of earlier times.

Significance

The importance of planning for change, rather than be controlled by change, is fitting in this situation because declining enrollments are becoming a reality at Gateway Technical Institute, hereinafter referred to as Gateway. Gateway is currently faced with a situation of declining full-time enrollments, with a new Full-Time Equivalency (FTE) at the same level as last year. This

change may imply that more students are pursuing their post-secondary education on a part-time basis while employed. This shift in student population to half days or evenings affects the utilization of faculty and staff assignments, facilities, and may reduce revenues derived by Gateway. Management strategies to cope with these and other future changes will require advance planning for effective decision-making.

An examination of enrollment growth in the State of Wisconsin's Vocational, Technical, and Adult Education (VTAE) districts paralleled the national growth of the 1960's and 1970's when it grew from 168,885 to 419,747 from 1963 to 1978 (Wisconsin Board of Vocational, Technical, and Adult Education,1979:10). Future enrollment forecasts by the Wisconsin Board VTAE revealed in their five-year plan 1978-1982, that there will be a low enrollment growth from 420,500 to 433,900 between 1980 to 1985 (Wisconsin Board of Vocational, Technical, and Adult Education, 1977:226).

In the Gateway District enrollments were also in an upward trend during these growth years when 12,399 students were served in 1963 growing to the highest in 1978 to 43,527. The future projections presented in the Gateway Long-Range Plan 1976-81, Supplement (1979:6) reported that high school graduates will diminish from a yearly total of 6,781 in 1980, 5,953 in 1985, to 5,452 in 1990. The overall population of the Gateway District will grow from

399,500 in 1980 to 450,100 in 1990.

Therefore, it appears evident that with declining high school graduates in the foreseeable future, the Gateway District must begin planning recruitment strategies to attract new students from the adult population 18 years and older.

As enrollments either shift or decline within an educational institution, these influences will impact on the resources in various ways. A major resource of any educational institution is its faculty and staff, and as enrollments decline there is a trauma created that potential lay offs affect the staff, programs, and students served (Kappen, 1978:25). In the absence of management strategies, hostilities flare and depression deepens. In the presence of management strategies, all who are willing can have a sure feeling of being involved in working out their own professional destinies.

During the growth years, the financial resources grew even faster than enrollments. But today through a 1976 legislative enactment, the Gateway District's ability to derive revenues from taxation is restricted to a maximum of 9.5 percent in a budget year. It is maintained by Richardson that if community colleges are to remain adaptive in a period of declining resources, they must change by substitution rather than addition. That is, if they want to add a new program or a new service in the absence

of new funds, faculty and administrators must decide what they will give up in order to initiate change. Change in the absence of increased resources results in financial complexity (Alfred, 1978:68).

Thus, the significance of this paper is to present recommendations to reduce the impact on each of these resources for the next decade ahead. Unlike the past decade, it will be more difficult and require greater sophistication in planning and research in order to provide meaningful leadership. In the work developed by Sprenger and Schultz on institutional management of declining enrollments, they stated:

> A final principle is to look within the institution for solutions. Plan for the solutions to lie within more effective utilization of present resources (Sprenger and Schultz, 1974:23).

Statement of the Problem

The problem is that technical institutes in the state of Wisconsin have been experiencing a decline in full-time student enrollments and an increase in part-time student enrollments. Gateway, which is a part of this statewide system of technical institutes, has also experienced this student shift. Therefore, the study was two-fold: to identify the effects declining or shifting enrollments have on the institutional management of Gateway's resources; and to develop recommendations to reduce the impact on each of these resources.

Objectives of the Study

The major objectives of the study were:

1. To collect existing data and information available for determining the extent and impact of declining enrollments at Gateway.
2. To identify potential student target groups and develop the appropriate recruitment strategies.
3. To determine faculty and staff development, retraining, and shifts in the workday hours to accommodate changes in student attendance hours, etc.
4. To determine from business and industry how Gateway could attract their employees to better serve their manpower training needs.
5. To develop recommendations to reduce the impact of shifting or declining student enrollments on the Gateway District's resources.

Purpose of the Study

This study was researched because similar supportive studies were not available in the State of Wisconsin for technical institutes. The purpose for undertaking the study was to determine the faculty, staff, business and industry perceptions of how Gateway can utilize its resources during a period of shifting or declining enrollments. The study was designed to provide a plan of information needed to assess past, present, and future enrollment

trends; student recruitment strategies; and future instructional delivery systems directed toward the consumers of the Gateway District's manpower training programs.

Expected outcomes of the study included, but were not limited to, a clarification of how many potential students exist; how they can be recruited; and the faculty and staff attitudes toward assisting the institution in reaching the commitments to its constituency.

The data derived from the study was used for purposes of improving the administrative decision-making task resulting from a shift in student enrollments. The study also provided a data base for further research in this area and can be replicated by other technical institutes.

Definition of Terms

Declining - refers to tending toward an inferior state, weakening condition, falling off and a period during which enrollments or resources are approaching a downward trend.

District resources - refers to something that lies readily available for use or can be drawn upon in an emergency to deal effectively with problems, i.e., wealth, property, faculty, and staff.

Institutional management - refers to conducting or supervising the functions of planning, organizing, coordinating, directing, and controlling any educational

situation with responsible results.

Perception - refers to an awareness of the elements of environment through direct or intuitive recognition.

Postsecondary education - refers to educational programs or services provided students beyond the secondary level. The term can be used interchangeably with higher education, college, university, or technical institute.

Shifting - refers to a change in the distribution of students in an educational institution, i.e., full time to part time or from day to evening.

Assumptions

The underlying assumptions of the study were:

1. The perception of faculty and staff is an essential element in the development of institutional strategies for the utilization of Gateway's resources.
2. The perceptions of business and industry is an essential element in planning recruitment and manpower training programs for their employees.
3. That by studying past Gateway enrollment trends and applying forecasting methods, future enrollment projections can be made within a degree of certainty.
4. That by knowing the impact of shifting or declining enrollments on Gateway resources, recommendations for effective decision-making

can be developed.

5. The two instruments used in the study were valid and reliable.
6. The faculty and staff at Gateway were representative of other personnel in technical institutes.
7. The data and opinions from the participants were correct and reflected their current perceptions on the usage of resources to accomplish the Gateway mission.

Limitations of the Study

The following have been identified as specific limitations to the study:

1. This study was limited to the Gateway District.
2. The business and industries surveyed in the study were limited to those organizations geographically located within the Gateway District.
3. The faculty and staff surveyed were limited to those currently employed full time at Gateway.

CHAPTER II

REVIEW OF RELATED LITERATURE

The review of related literature in Chapter II has been subdivided into three main categories, namely: sociological factors that affect postsecondary education; affects of shifting or declining enrollments on institutional resources; and alternatives to shifting or declining enrollments.

Sociological Factors That Affect Postsecondary Education

It was not until George Grier of the Washington Center for Metropolitan Studies analyzed the preliminary runs of the 1970 Census and published his monograph, The Baby Bust, in 1971, that demographers began suddenly to realize that a dramatic and, indeed, unprecedented turnaround was occurring. Suddenly we heard about "zero population"--a no-growth economy and the economic and social consequences of decline (Sargent, 1976:88).

As reported by Hazel Reinhardt in a Wingspread Conference, she stated that a graphic portrayal of live births in the United States from 1947 to 1977 reveals the following patterns: 1947 to 1957 was called the "baby boom"; 1957 to 1977, the "baby bust". Births were up immediately after the war. They went down a little bit and then started a

very substantial rise. What is unique about the "baby boom" is that after almost every conflict in human history there has been an increase in births. What is unique about what happened in the United States is that it lasted for so long. In Western Europe, the upward surge of fertility, after the end of the Second World War, was over in two years. In the United States it lasted ten years, and it produced a very different population configuration than exists in other industrialized countries of the world. The "baby bust" is simply an indication that fertility does not move in nice smooth lines. In 1973, the rate went down quite sharply; and in 1974 it was up again (Changing Work Force Needs with Implications for Higher Education, 1978: 24-28).

The United States Bureau of Census 1977, developed a series of three projects on fertility in order to estimate a high, moderate, and low population growth. At the Series I, which is a fertility rate of 2.7, births would be dramatic. These births are based on 49 percent of the original "baby boom", which represents the largest number of women ever in prime childbearing years, between the ages of twenty to twenty-nine. At the Series II, which is at a 2.1 fertility replacement level, there would be just slightly fewer births than occurred at the peak of the "baby boom". At the Series III, which is at a 1.7 fertility level, the birth rate would be considerably lower (Changing Work Force

Needs with Implications for Higher Education, 1978:27-28).

In Wisconsin, the number of births reached a high of 9,500 in 1960 and declined to 62,800 in 1973. Since 1973, the number of births per year has increased to 70,000 in 1977. Complete agreement has not been reached concerning the extent to which this increase will continue (Stevens, 1979:5).

The following assumptions were made by Wisconsin demographers as they seek to identify the range and scope of potential enrollments of students seeking educational opportunities in postsecondary education during the next two decades:

1. The age pool of 18 and 19 year olds will decline during the next 15 years and then increase from 1992-1995. The number of 18 year olds in the state will reach a peak of about 100,000 in 1980 and then decline to roughly 62,000 by 1992. This is a 38 percent reduction of 18 and 19 year olds by 1992.

2. The number of women in the fertility age group will be unusually large during the next 15 years, increasing by 33 percent from 860,000 in 1975 to 1,143,000 in 1990. Unless births reach unexpected lows, the number of births will continue to rise in the near future. It also is expected that the size of the traditional age pool will be minimally affected by migration since the State of Wisconsin is essentially a zero net migration state.

3. The size of families supporting children enrolled in higher education will decrease substantially during the next several years as a result of declining birth rates. Thus, there will be fewer children in each family. Wisconsin births per 1,000 women (18-34) reached a high of 245 per 1,000 women in 1972. Research has demonstrated a strong correlation

between sibling spacing and family size and participation in higher education (Wisconsin Population Projections, 1975:18).

These factors are evidenced by enrollments in Wisconsin's public and nonpublic elementary schools that have dropped 8.7 percent since 1970. Last year 1977-78, public high school and elementary school enrollments declined by 2.9 percent or 27,474. Projections for 1982-83 indicate that there will be 17.3 percent or 159,063 fewer students enrolled in public elementary and secondary schools than in 1977-78. The downward trend in elementary enrollments is expected to continue until the mid-1980's, while high school enrollments will continue to decline until 1990 (Stevens, 1979:3).

For educational planners in postsecondary education "the die has been cast" for much of this century. As this large population in the "baby boom" continues to grow older, their educational needs will reshape our postsecondary institutions (Eisenberger, 1978:36-38).

There have been other social factors that have contributed to the uncertainty of postsecondary education in the United States. According to a Carnegie Commission on Higher Education, More Than Survival (1975:31), at least four factors may be presumed to have played significant roles:

1. The abolition of the draft
2. The sharply rising costs of college attendance that have been associated with accelerated

inflation rates and accompanying increases in tuition and other college charges

3. The changes that have occurred in the job market for college graduates, especially the narrowing gap between wages received by high school and college graduates

4. Liberalization of college rules to permit deferred admission and "stopping out" of students in the midst of college careers.

> The idea of "stopping out" emphasized that society would actually gain if work and study were mixed throughout a lifetime. . . society would be more integrated across the lives that now separate students and work, youth, and age.

According to the Department of Labor, as cited by Fields (1978:1), it estimates that one-fourth to one-third of all employees are presently engaged at jobs substantially below their training level; perhaps 950,000 bachelor's degree holders between 1974 and 1985 will be obliged to settle for jobs that leave them "underemployed". It is further claimed by Fields that, "a society that encourages too many students to go to college risks an unbalanced labor market and disillusioned and frustrated young people" (Field, 1978:3).

It is maintained by Hickman that another social trend has shaken our society and that is the divorce rate that has forced women back into the labor force in order for them to maintain their single-parent families. In 1940, for every six marriages, there was one divorce. In 1975, for every two marriages, there was one divorce (Changing Work Force Needs with Implications for Higher Education, 1978: 48). During an interview, demographer Eisenberger stated

that 45 percent of the children born in 1976 will at some time during their school years be living within a one-parent family (Kappen, 1978:21).

These trends would indicate a growing need for retraining as more women find themselves requiring employment. The participation rate of women in the labor force has continued to rise and also increases their demand for educational opportunity (Crockett, 1978:78).

A final social factor that postsecondary education is currently faced with is the fiscal crisis afflicting higher learning in America. It is real, omnipresent, and foreboding (Cheit, 1971:3). The reasons are complex: 1) a prolonged and costly war in South East Asia; 2) student unrest in the 1960's; 3) inflation; 4) competing social programs, especially welfare and health services; and 5) a startling loss of public confidence in the entire enterprise (Ashby, 1972:36). It was also confirmed that the two-year colleges must compete for state resources with other services as welfare, mass transportation, public health, police protection, and pollution control. The increased competition for funds accompanied by a widespread disillusionment with public education will probably result in a relatively smaller share of public revenues for institutions of higher education (Johnston, 1977:59-64).

Effects of Shifting or Declining Enrollments on Resources

In a study conducted of 163 institutions in fourteen states, it was found that 41 percent of the two-year institutions had undergone staff reductions during 1971-74 (Sprenger and Schultz, 1977:22-23). While a larger sample might have changed the percentages somewhat, it would not have changed the awareness that faculty reductions driven by enrollment decline are a common experience.

Staff reduction has become a vital issue because of the combination of circumstances facing higher education today: declining enrollments, declining financial support, inflation, low faculty turnover, and changing student interest with regard to programs and courses (Schultz, 1976:3). In a survey conducted of administrators in higher educational institutions, they found that declining rates of enrollment growth increases authority struggles and greater efforts to participate in the affairs of the institution by faculty (Uehling, 1978:378; Carnegie Commission on Higher Education: A Classification of Institutions of Higher Education, 1973: 19).

In working with three community college faculties, Flichinger (1978:16) assessed their attitudes toward staff reduction based upon some sort of merit or seniority. The findings of the study were as follows:

1. It was found that 64 percent disagree with using enrollment as a basis for staff reduction. Some faculty believed that students shy away from "hard" instructors that student decision

as to what instructors to take for classes are not reliable. There may also be the feeling that using student enrollments as a basis for staff reduction would lead to instructors lowering their standards and engage in popularity contests if they thought their job depended upon enrollments.

2. The faculty response was clearly in agreement with 78 percent agreeing with the use of evaluation as a basis for staff reduction.

3. When asked should the ability to teach be considered more important than credentials, they agreed.

4. Contrary to what has been assumed to be general faculty attitude favoring seniority, the faculty responded 58 percent in disagreement with seniority as the main criterion for staff reduction. It should be noted that there were 79 percent of the faculty that had less than five years of service disagreeing with the concept of seniority, and 59 percent of the faculty with 11 to 15 years of service that also were in disagreement. By contrast, 82 percent of the faculty with 16 or more years of service agreed with the concept of seniority.

Another factor influencing the faculty and staff is the diminishing job mobility and advancement opportunity which has created a maturing staff in many educational institutions (Kappen, 1978:23; Carnegie Commission on Higher Education: More Than Survival, 1975:13; Uehling, 1978:384). Most of the faculty hired within the last 20 years are at the top of the salary scale, with 15-25 years of service (Kappen, 1978:22). The outflow due to retirement is at a low level--half of all faculty members were first hired in the 1960's and will not reach retirement age until about the year 2000 (Carnegie Commission on Higher Education: More Than Survival, 1975:11).

> Probably the most damaging impact that declining enrollments have on a faculty and staff is the deterioration of morale and their receptivity to change, and acceptance of new ideas. . . it is extremely difficult to maintain the momentum, excitement, and enthusiasm that once permeated a growing system (Kappen, 1978:21).

Facilities represent the next largest expenditure of an institution and must be managed with some discipline and accountability as other resources. No longer can the cost of owning and operating them remain a vague overhead figure, divorced from the direct cost of education delivery. A more pragmatic approach is necessary--knowing the true cost of facilities and insuring utilization levels that justify those costs (Adams, 1978:68c). Efforts to improve the utilization of facilities can lead to savings in operating and capital costs and at the same time, to improvements in scheduling flexibility and student course selectivity (Shirley, 1975:441-443). Administrators of facilities are cautioned by William Keough, currently directing the Enrollment Decline Information Service, not to cut preventive building maintenance even though it looks good in the short run for many reasons, but it usually leads to doubly expensive corrective maintenance in the long run (Eisenberger, 1978:36).

The next area affected by shifting or declining enrollments deals with financing patterns of community colleges. The methods used to finance community college

courses today in several states are considerably different from those followed in earlier years. In the early 1920's, when Koos made his baseline study, 137 of the 207 junior colleges then in existence were private institutions (Koos, 1924:43). Of the remaining 70 institutions, 46 were public, operating in affiliation with local school systems. The financing reflected the practices of private undergraduate colleges (in the case of private junior colleges) and the local public schools (in the case of the public junior colleges). Since Koos' study, examinations of junior and community college finances have consistently shown five major sources of income for two-year college operations and two for financing of capital costs. The main sources of support for the operating budgets are student tuition and fees, local tax funds, state tax funds, federal grants and private gifts and grants. For capital costs, the main sources of support are local and state tax appropriations (Alfred, 1978:90).

Particular interest is the direction in which community colleges are moving in relation to each of the main sources of support for their operations. A review of available studies reveals that the percentage of operating costs borne by state sources had moved from an average of slightly over a third, across the nation, in 1955-56 to 54 percent in 1967-68; during that time the percentage borne by the student

increased at a much lower rate, from 20 to 22 percent. The percentage carried by local tax sources decreased considerably, from 37 to 20 percent on the average nationwide. On the basis of this data, the conclusion was drawn:

> that state governments are moving toward the position of providing more of the funds for community colleges than local governments, while the student's proportionate share is changing only slightly (Martorana, 1971:76; Arney, 1969:89; Wattenbarger and Cage, 1974:126).

The shifts in sources of support for community colleges are not the result of happenstance. They reflect changing public policy positions taken on the broad question of support for higher education, and they parallel trends in legislation at the local, state, and federal levels (Alfred, 1978:89). Community college leaders, like those in other types of public institutions, are highly sensitive to changes in the political milieu. To be successful, these leaders must anticipate changes in the patterns of support for their colleges. When one or more constituencies seem unlikely to contribute their normal share, efforts are made to secure larger amounts from other sources to offset the difference. In this way, shifting patterns of community college finance are to some degree a product of the behavior of community college leaders (Alfred, 1978:91).

In planning for the future, it is apparent that the federal administrator's lessening support in three areas has a substantial impact on Wisconsin VTAE districts. The three proposed cutbacks in vocational education funding:

$190 million in vocational education basic grants to states for Fiscal Year 1980; cutback in Career Education Incentive Act for an entire appropriation of $32.5 million for Fiscal Year 1979; and most importantly, substantial reductions in student aids (Stevens, 1979:8).

The final resource which is actually the lifeline and potential existence of any institution is its academic programs and services. Academic programs are intended to be goal-oriented sets of educational experiences, usually credit courses, leading to a specific degree in a designated field. Typically, academic programming is a reaction to perceived changes in social and institutional conditions and values and thus are subject to "cultural lag"; that is, it represents a somewhat delayed response to apparent shifts in priorities, especially those related to technology, the economy, and cultural values (Ogburn, 1927:41).

In a research study conducted by Martorana and Kuhns they identify some of the newer conditions and values influencing programming decisions in the late 1970's as:

1. Open-access policies that have attracted many new and poorly prepared students into college;
2. The reduction in the pool of "traditional" students, which had adversely affected enrollments in some institutions and some diciplines;
3. Affirmative action policies;
4. The new majorities of part-time and female students;
5. The increasing demand for noncredit and nontraditional educational opportunities;
6. The overproduction of graduates relative to job opportunities;

7. Developments in collective bargaining that tend to emphasize adversary rather than collegial relations and to result in increased personnel costs;

8. Geographical duplication of degree programs;

9. The "Taxpayer's rebellion", as evidenced by the passage of Proposition 13 in California;

10. Inflation-fed pressures to review resource allocation for all services (protection and welfare as well as education) (Martorana and Kuhns, 1978:33).

A further examination of a few stated conditions or values presented by Martorana and Kuhns would provide greater insight as to their impact on academic programming. The issue of open-access policies have affected the curriculum in that compensatory education courses have been added to curriculum for the benefit of those students unprepared for college-level work is essential subjects (Cross, 1976:13). These students also have need for more counseling, remedial courses, self-concept development, health care, and other services (Rippey and Roueche, 1977:55).

The issue of the "traditional" student reduction and emergence of the "nontraditional" student has now become a way of classifying student groups in many institutions. An attempt was made by Kyle to identify characteristics of the "traditional" student and "nontraditional" student which might be considered somewhat mythical. The "traditional" student characteristics are:

18 to 24 years old; a full-time student; family dependent; middle/upper socio-economic groups;

predominantly white; predominantly male; not in labor force; and completes a degree at one institution.

The "nontraditional" student characteristics were described as:

> 25 years and over; part-time student; non-family dependent; all socioeconomic groups; all racial groups; male/female about even; in labor force or about to join it; and may attend two or more institutions to complete a degree (Kyle, 1978:2).

The final issue to be discussed is Proposition 13, a constitutional mandate of California which affected every community college system within that state. Proposition 13 limited the property tax growth per year to two percent. The effect will possibly cause continued financial problems until a permanent revenue source is enacted by the California legislature by 1981. In a survey conducted by Angel and Karathanos of California community college presidents relative to the effects of Proposition 13, the following results were derived:

1. The overwhelming majority of schools (88 percent) are operating with smaller budgets this year. The budget reductions range from 2 percent to 20 percent, with an average of 11.6 percent.

2. The majority of schools (69 percent) experienced a drop in enrollments last fall averaging 8.6 percent. The decreases ranged from 1 percent to 26 percent.

3. Although budget reductions were reported in most areas mentioned, the programs which seem to have suffered the most are: Community Services (92 percent made reductions or completely eliminated services); travel (91 percent); capital outlay (83 percent); supplies (76 percent); maintenance and operations (75 percent);

and overtime pay of classified personnel (74 percent).

4. Areas in which less than half the colleges made budget cuts are: counseling (40 percent); telephone (38 percent); freezing of step (experience) or column (further education) increases in salaries (21 percent); and employee fringe benefits (6 percent) (Angel and Karathanos, 1979: 18c).

Thus academic programming was a reaction to these and other real or perceived shifts in conditions and values, which together constitute the environment in which academic programming decisions are made.

Alternatives to Shifting or Declining Enrollments

Educational institutions being a creature of their environment seem to have three alternatives according to Harris when enrollments decline:

1. Passively shrink with the decline of eighteen to twenty-four year old population, as it eagerly grew with its growth in the 1950's and 1960's;

2. Doggedly work to increase the proportion of eighteen to twenty-four year olds entering as full-time students; or

3. Create new students among older people who are employed or retired (Harris, 1978a:270).

In a presentation at the 1978 Nova University Summer Institute, Frederick Kintzer effectively identified three stages of survival that an institution can initiate when faced with student declines:

First Survival Technique

1. Entice new groups of potential students.

2. Develop new programs for the new majority.

3. Rely on examinations and provide nontraditional curricula but avoiding acceptance of such credit.

4. Specialize in lifelong learning.

5. Attract the international student.

6. Ease admission and course requirements--accept marginally qualified applicants.

Second Survival Technique

1. Bring educational opportunities to the new clientele.

2. Develop statewide systems--individual institutions--credit brokers--corporations.

Third Survival Technique

1. Reduce payroll

2. Reduce services

3. Reduce quality

The suggestions presented provide an overall institutional approach during a period of decline but what alternatives exist specifically for the following educational resources; faculty and staff; facilities utilization; student recruitment/retention; academic programs and services; and finance (Harris, 1978a:268-269; Kintzer, 1978:1-2).

Faculty and staff. Alternative considerations available relative to the replacement of faculty and staff was presented in a Carnegie Report which suggested careful planning and flexibility through such procedures as:

1. Recapturing, for central campus assignment,

positions vacated by retirement, resignation, or death.

2. Hiring temporary and part-time faculty members.

3. Making increased use of joint appointments between departments.

4. Seeking persons with subject matter flexibility and encouraging field shifts through retraining and through use of leaves for study.

5. Providing opportunities for early retirement on a full-time or part-time basis (Carnegie Commission on Higher Education, More Than Survival, 1975:93).

When it is imperative that faculty or staff must be terminated when decline occurs, some general techniques that can ease the pain are:

1. Provide funds for staff development and in-service training that relate to the institutions long-range goals.

2. Develop financially attractive programs to encourage early retirement and other forms of attrition (Eisenberger, 1978:38).

Lombardi warns from the start that colleges should not use staff reduction as a means to suddenly begin firing unwanted teachers. They should carefully develop both procedures, which are at issue in most court challenges, that guarantee due process and reduction policies that prevent arbitrary or discriminatory dismissal.

Upon a full review of institutional policies, collective bargaining agreements and court action, Lombardi concludes that staff reduction will present the least problem when reduction criteria are objective and easily identified and when faculty participate in policy development, receive

early warning of possible reductions and enjoy opportunities for reassignment, retraining, and rehiring, if dismissed. Of prime importance, he states, is the willingness of administrators to consider all alternatives to actual dismissal (Lombardi, 1974:28).

Student recruitment. The need to evaluate student recruitment efforts is becoming increasingly important. As competition increases and finances remain tight, the need to know what works best for institutions, so that enrollments are maximized and costs are minimized. Institutions need to know where they stand and how they can improve (O'Connell, 1978:6). Such an examination of the characteristics of students who have historically attended and are now enrolled on the basis of objective and personal characteristics can be divided into characteristics of an academic nature and those of a nonacademic nature (Mudie, 1978:43). The academic data would naturally include examination of American College Testing Program (ACT), Scholastic Aptitude Test (SAT), achievement and other standardized test scores, along with indices of grade point averages and class rank that students earned in their secondary schools. Another academic characteristic involves student choices of courses and programs. Some departments and programs within a college are more apt to be influential in attracting students than others, and these differences deserve attention.

The nonacademic characteristics would consist of: geographic location of the students now attending; know what high schools present students come from and whether it reveals a pattern or trend; the families economic situation; know to what extent of the students receive financial aid; know the other institutions the students have applied to for admission.

Once this process of coming to know the characteristics of the current students and past prospects is completed, the institution is now in a position to determine which students are desirable potential for the institution, how to identify them, and how to expand the pool from which they can be drawn.

If the future pool of postsecondary students rests with the nontraditional student, who is typically in the labor force, then articulation agreements between education and work should be pursued. Accumulated evidence from education and training programs in private industry generally suggest an increased interest and investment in worker education. In 1975, investment was established at two billion dollars, $400 of it in tuition-aid programs (Lusterman, 1977:8). This search is bolstered by the belief that future workers will experience many more job changes than heretofore during their working lives, and that these changes will require further education (Allen, 1978:15).

Based upon the assumption that expansion of education in the work place requires greater flexibility in the scheduling of work, there are signs of accommodation. One indication is the trend toward increased use of flextime. A recent study indicates 12.8 percent of all nongovernmental organizations with fifty or more workers now use flextime (Nollen and Martin, 1978:8-15). This figure represents 5.8 percent of all workers. By industry the utilization is: finance and insurance 19 percent; transportation, communication, and utilities 17 percent; wholesale and retail trade and service industries 14 percent; and manufacturing 10 percent.

A second indication is the reduction in the length of the work week also facilitates the integration and scheduling of education and work (Bureau of Labor Statistics, 1977:32).

But probably the most significant change in the labor force is the increase of part-time workers. If this trend continues, scheduling and financing problems created by release time, alternation of work and learning, and worker replacement should be much easier to solve. The alternation of work and education has already begun. It is commonplace among young workers (Allen, 1978:19).

Student retention. The enrollment level, according to Noel (1978:32), of an institution is affected directly by its retention rate. Reducing the number of students who drop

out for the wrong reasons may be the quickest and most appropriate way to increase enrollment. It should be emphasized that enrollment maintenance should not be the goal of an institution but a by-product. Increased retention will result if programs and services for students are improved.

Noel has also suggested that the following review steps be considered by institutions as ways to improve their student retention:

1. Establish a campus-wide retention steering committee.
2. Determine the campus dropout rate.
3. Conduct a dropout study to determine why students are leaving.
4. Conduct an institutional self-study to determine where the institution is successful and where it needs improvement.
5. Establish retention task committees within each of the campus units or departments to determine student-orientated action programs appropriate for their area.
6. Make a concerted effort to increase faculty and staff awareness of factors related to retaining students; encourage a campus-wide attitude of serving students.
7. Build a sound marketing approach into the recruiting program.
8. Develop a meaningful orientation program for entering students.
9. Build a student counseling/advising program from admissions through job placement.
10. Provide a special career-planning program for students who are undecided about educational major or vocational choice.

11. Provide a range of academic support services for students with marginal academic credentials.

12. Build an "early warning system" to identify students that are likely to drop out.

13. Set up a simple but sensitive exit interview process (Noel, 1978:83).

Facilities utilization. The alternative choices available to boards and administrators that find they have more space than they need, three course of action typically present themselves: redistribution of students or programs; find someone to lease the space; or mothball a portion or all of the buildings (Leggett, 1977:27-28).

In recent studies funded by the Mott and Ford Foundations argue that consolidation of schools is not proving the ideal solution it seemed on paper. One such study observed:

> Students are not the product of assembly-line construction; they are individuals whose sense of identification, responsibility, and participation are adversely affected by largeness, no matter how cost-effective it may be (Brooks, 1979:59-60).

Gores suggests that the most prudent public policy is to hang on to the school buildings and fill it with other compatible constitutencies as the student numbers diminish (Gores, 1976:92-97).

Academic programs and services. Higher education is increasingly the proportion of high school graduates who enter higher education, and it is also interested in older part-time students. But it takes several part-time students

to equal the revenue received from one full-time student, and there is some question whether enough part-time students will enroll to compensate for the decline in numbers of traditional full-time students expected in the 1980's.

Whatever the enrollment outcome, serving older students will surely mean giving them appropriate credit for achievement based on experience or nonformal study. Awarding credit for programs aimed at such students will ultimately rest on the strength of the means used to assess directly their achievement from prior learning (Harris, 1977:4; Harris, 1978b:272).

The programs most likely to be awarded credit are those which directly assess the accomplishments of students, regardless of how, when, and where they reach them. Assessments must demonstrate a student's possession of requisite knowledge or skill. Students should be presented tasks in standard or common circumstances in order to allow appropriate judges to appraise student performance or products against a pre-established criteria (Harris, 1978b:276).

As the emphasis on quality has shifted from entrance standards to exit standards, curricula patterns must shift from the commontime-and-approach method to a mastery learning model. If the aim of a college curriculum is to further separate the most able from the least able, then it makes sense to teach all the students the same way for the same amount of time. If an institution shifted from assuring

quality through admission requirements to using exit criteria for degrees, then the curricular model of common means and time of instruction becomes irrelevant. Instead comes a learning-for-mastery model. This thesis of learning for mastery was first developed by John Carroll and advanced by Benjamin Bloom. In the conventional approach, students vary in incoming abilities, are subjected to common instructional treatments, and so vary in outcomes of instruction. In the mastery learning approach, means and time of instruction are adjusted to incoming student differences in order to get most of them to a predetermined, common, minimal level of performance.

In working with curriculum, Freeman perceived it as a collection of means to help the student attain the expected masteries (Freeman, 1973:28). In this case, nothing has to be standard about curriculum. It is purely a collection of avenues--any or all of which could be changed in terms of their effects on student achievement. Education can then proceed as does good science--it "finds order in" rather than "imposing order on". When curricula are viewed as commontime and treatment hurdles and education is measured as time spent rather than masteries achieved, there is no feedback (Harris, 1972:59-65). The desirable alternative is to emphasize feedback in curriculum development; curricula are then developed from the paths students make to goal achievement. It is somewhat like laying sidewalks

on paths people make rather than laying out a theoretic pathway system and then urging people to walk on them. In making paths, walkers will find the most economical route to their destinations. Similarly, students will choose the best routes if their educational destinations are clear and if there are ways to detect the most efficient and effective means of learning. If curriculum development is to move from a theoretical, a prior approach to a pragmatic, ad hoc approach, assessment procedures have to be sensitive to treatment differences (Harris, 1978a:276-277).

Finance. In a survey conducted by Martorana of 16 state directors and 68 chief executives of community or junior colleges, all respondents indicated that some strategic actions in response to the likelihood of declining support were under consideration. Among the list of measurers identified, the responses fell into four basic groups:

1. More effective administrative management of fiscal affairs at the institutional level,
2. Economizing measurers in instruction and programming practices in institutions,
3. Stronger public information and lobbying efforts,
4. Increases in student tuition and fees.

Public community college presidents indicated greater emphasis on:

1. Economizing measures in instruction and programming practices,

2. More effective administrative management of financial resources,

3. Direct efforts to increase resources through increased local and state taxes, tuition increases, and private gifts and grants (Alfred, 1978:94).

Summary

In summary, a major theme found in the review of literature related to sociological factors that affect postsecondary education. According to the literature, the declining birth rate and smaller family size has impacted on all educational levels, and with the increasing high divorce rate, almost half of the children born today will be numbers of single parent families. Another social factor has been government's inability to control the accelerated inflation rates which in turn have forced educational institutions and government to demand higher tuition rates to partially offset these increases. Also, education, which had the financial commitment from all levels of government and taxpayers, now finds itself with diminishing support and greater competition from other social agencies for the limited resources. Thus, high inflation and increased tuition coupled with the uncertainty of college graduate placement and the reduction in the financial gain between college graduates and high school graduates has reduced the attractiveness of postsecondary education degrees.

A second major theme treated in the literature was the effect enrollments have on institutional resources.

According to the literature, faculty and staff are faced with diminishing opportunities for job mobility and advancement as enrollments continue to decline. Thus, with a reduced turnover rate, it has created a maturing faculty and staff which in turn increases the cost of operations. Also, emphasized in the literature was the fact that declining student enrollments have a deteriorating effect on morale by increasing anxieties due to layoffs, as well as their receptiveness to change and acceptance of new ideas. When layoffs occur, faculty and staff prefer performance evaluations if they have relatively few years in the system, while those with more years prefer the security of a seniority system.

In the literature, facilities represent the next largest resource directly affected by enrollment shift or decline. It has been emphasized that greater care in managing the utilization level which in turn justifies the direct costs. A caution was pointed out that preventive maintenance be continued on a regular basis even though cutting these funds are tempting but more costly in the long run.

Another factor affected by shifting or declining enrollments was financing patterns of community colleges. The main sources of support for operating budgets was identified as student tuition and fees, local tax funds, state tax funds, federal grants, and private gifts and

grants. There has been noticeable change during the past twenty years in the percentage of resources provided by the main sources to community colleges; namely, state tax funds have increased their support from one third to over fifty percent; student tuition and fees have increased slower from twenty to twenty-two percent; and local tax funds have decreased from thirty-seven to twenty percent. As shifts occur in the funding sources, educational leaders will be readjusting their approach to capture more revenue from other external sources.

A final factor identified as being affected by shifts or decline in enrollments was academic programs and services. As a decline occurs, acceptance policies for students are reduced to encourage more to enroll thus creating a pool of students unprepared for college-level work. These same students also require more services, i.e., counseling, remedial courses, etc.

The last major theme discussed in the literature was the alternatives available to educational institutions when enrollments either shift or decline. The alternative when dealing with faculty and staff during a time of retrenchment is to recapture campus assignments vacated, hire temporary or part-time faculty members, or develop an early retirement plan. Administrators should extend a willingness to consider all alternatives before an actual dismissal.

A major consideration when enrollments decline calls for a greater emphasis in student recruitment activities. According to the literature, institutions need to know where they stand in the educational marketplace and how they can improve their position. Institutions need to examine the characteristics of their students, i.e., standardized test scores, grade-point averages, and class rank in secondary schools. Some nonacademic characteristics would consist of: geographic location, secondary school attended, family's economic situation, know what students receive financial assistance, and the other institutions that students have applied to for admission.

If the future pool of postsecondary students rests with the nontraditional student, who is typically in the labor force, then articulation agreements between education and work should be pursued. A significant change in the labor force has been the increase of part-time workers, and if this continues scheduling and financing problems created by release time, alternatives to work, and learning should be much easier to solve.

Another technique used to increase enrollments is to develop a sound student retention plan for thos students enrolled. It was emphasized in the literature that enrollment maintenance should not be the goal of an institution but a by-product.

There are three alternatives available to boards and administrators when they have too much space available; namely, redistribution of students or programs; find someone to lease the space or mothball a portion. A prudent approach to this situation would be to hang on to all buildings and fill it with other compatible constitutencies as the student numbers diminish.

Another alternative to declining or shifting enrollments involves the academic programs by shifting from entrance requirements to exit standards. If an institution shifted from assuring quality through admission requirements to using exit criteria for degrees, then the curriculum model of common means and time of instruction becomes irrelevant. If curriculum is perceived as commontime and treatment hurdles and education is measured as time spent rather than masteries achieved, there is no feedback. The desirable alternative is to emphasize feedback in curriculum development; curricula are then developed from the paths students make to goal achievement.

The final alternative available to educational institutions when enrollments decline is potential finance strategies. Public community colleges have to identify two key strategies: more effective management practices and economizing measures in instruction and programming practices.

CHAPTER III

PROCEDURES AND METHODOLOGY

The purpose for the study was to determine the faculty, staff, business and industry perceptions of how Gateway can utilize its resources during a period of shifting or declining enrollments.

There were two surveys conducted to determine from Gateway's personnel and constituency, methods or alternatives in combating the future enrollment changes. The Faculty and Staff Survey was conducted to determine the following:

1. What is their attitude on the necessity of current programs and services?
2. What professional development for training or retraining will meet the changing needs of students and Gateway?
3. What alternative strategies could be developed to maximize the utilization of Gateway resources during shifting or declining enrollments?

The second survey involved the represented constituency of business and industry of the District. This survey was designed to find answers to the following questions:

1. What type of employee training presently exists and the source of that training?
2. What assistance are employees provided by their employers to participate in training programs?
3. How can Gateway better serve employer needs?

Faculty and Staff Survey

The survey was made on 100 percent of the following population total of 215 full-time employees, faculty and staff at Gateway:

1. All 177 full-time faculty employed.
2. All 38 full-time faculty coordinators, supervisors, and administrators employed.

Business and Industry Survey

A stratified sample was used to obtain a greater degree of representation from the business and industries surveyed, rather than a random sample from the total population. The stratified sample of the business and industries was made of the following:

1. A survey was made of 50 businesses that have 50 or more employees that are located in the Gateway District.
2. A survey was made of 50 industries that have a minimum of 100 employees that are located in the Gateway District.

Data Collection Procedures

The population of the study was surveyed by the use of printed questionnaires which were distributed in the following method:

1. The Faculty and Staff Survey was manually distributed and collected in faculty and staff meetings to insure maximum return of survey instruments.
2. The Business and Industry Survey was mailed with a cover letter and an enclosed stamped, self-addressed envelope to a respondent's list developed from the Classified Directory of Wisconsin Manufacturers (1978:85-250), and Chamber of Commerce of Racine, Kenosha, and Walworth Counties. The procedures used to follow up the nonrespondents is a technique suggested by Orlich (1978: 94) in Designing Sensible Surveys:
    a. Mail the questionnaire--first mailing.
    b. Within three weeks of the first mailing--send a second questionnaire, with a second cover letter stressing the importance of the instrument being returned.
    c. Within two weeks of the second instrument--mail a third instrument.
    d. Last effort approximately one week later--telephone the nonrespondents.

The Faculty and Staff Survey and Business and Industry Survey instruments were initially developed from the

review of literature which served as resources for items to be included in the instrments. Then both surveys were reviewed by a panel of experts consisting of six faculty members and three cabinet level administrators as represented in Appendix A. The validity of the instruments was determined by this panel of experts who reviewed the instruments to determine the property of the instruments to measure that for which they were designed. As a result, recommended modifications were made to each survey instrument.

A field testing of both instruments took place before the final surveys were conducted to determine the validity. The Faculty and Staff Survey was test sampled by five faculty members; and the Business and Industry Survey was distributed to five businesses and five industries represented in Appendix B, along with cover letters sent to the respondents as presented in Appendix C, and the final survey instruments used are represented in Appendix D and E.

Data Analysis

The results derived from the classifying data of the Faculty and Staff Survey were used to develop a faculty profile and staff profile as to their: age, total years of experience, years employed at Gateway, related work experience, current degrees, and professional development since being employed at Gateway. An analysis of variance was conducted of item 10 and its 12 subparts between faculty responses and staff responses to the statement: "GTI should

perform the following items in order to maintain the high quality educational programs." The responses created by ranking the options available to faculty and staff during a period of declining enrollments were prioritized by faculty responses and staff responses. The open-ended questions were itemized by related response groupings and presented in narrative form to reflect the responses generated in the Faculty and Staff Survey.

The data received from the Business and Industry Survey were classified by the type of the firm's activities and the number of full-time employees. Data was summarized by frequency count and percentage of response to each item received as to the extent of company training effort, type of source of training for employees, the company training incentives for employees, and more effective aid to business and industry in their training effort. The open-ended questions were summarized by related response and presented in narrative form to reflect their response elicited in the Business and Industry Survey.

CHAPTER IV

FINDINGS

Faculty and Staff Survey

The total population was surveyed consisting of 215 full-time employees with a total survey return of 66 percent. An examination of the survey returns indicated a faculty response of 65 percent as compared to a staff response of 71 percent. The faculty responses consisted of instructors, teaching assistants, guidance counselors, and nonadministrative support staff. The staff responses consisted of administrators, supervisors, coordinators, and administrative support staff. Table 4.1 represents a total breakdown of the faculty and staff respondents by their departments, position held, and percent of respondents.

Table 4.1

Profile of Faculty and Staff By Department, Position Held, and Percent of Responses

EN = 143 Staff N = 27 Faculty N = 116

Number	Department	Supv.	Coord.	Inst.	Supp. Staff	Percent of Responses
4	Admin. Serv.	1	1	--	2	3
31	Comm. Serv.	4	8	8	11	22
96	Instruct. Serv.	2	7	82	4	67
8	Student Serv.	2	--	--	6	6
3	R & P Serv.	1	1	--	1	2
143	Totals	10	17	92	24	100%

In an effort to develop a faculty profile of the respondents Table 4.2 shows a modal age range to be 41 to 50 years, with 69 percent having 6 to 20 years of experience in the Gateway District, and 72 percent having a total teaching experience of 1 to 10 years. It is noted, as previously cited, that 69 percent of the faculty had 6 to 20 years of experience which parallels the growth years of expansion of the 1960's and 1970's when faculty were added in large numbers.

Table 4.2

Gateway Faculty By Age, Length of Employment At Gateway, and Total Number of Years of Teaching Experience

N = 116

Number	Age Range	Length of Employment								Total Years of Teaching Experience							
		1-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35	1-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35
15	20-30	10	5	--	--	--	--	--	--	13	2	--	--	--	--	--	--
32	31-40	4	13	13	2	--	--	--	--	16	11	5	--	--	--	--	--
45	41-50	3	10	10	15	4	2	1	--	13	15	13	3	1	--	--	--
20	51-60	1	4	4	5	2	2	2	--	2	8	9	1	--	--	--	--
4	over 60	--	--	1	--	1	1	--	1	1	2	1	--	--	--	--	--
116	Totals	18	32	28	22	7	5	3	1	45	38	28	4	1	--	--	--

In Table 4.3 the staff respondents profile indicates a modal age range of 51 to 60 years, and 30 percent of which had between 16 to 20 years of employment, and more than one out of three had administrative/teaching experience of 11 to 15 years.

Table 4.3

Gateway Staff By Age, Length of Employment At Gateway, and Total Number of Years of Teaching/Administrative Experience

N = 27

Number	Age Range	Length of Employment								Total Years of Teach./Admin. Exper.							
		1-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35	1-5	6-10	11-15	16-20	21-25	26-30	31-35	Over 35
1	20-30	1	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--
8	31-40	2	1	3	2	--	--	--	--	3	1	4	--	--	--	--	--
8	41-50	--	2	2	2	2	--	--	--	2	3	3	--	--	--	--	--
9	51-60	--	--	1	3	1	2	1	1	1	2	3	1	--	1	1	--
1	over 60	--	--	--	1	--	--	--	--	—	1	--	--	--	--	--	--
27	Totals	3	3	6	8	3	2	1	1	7	7	10	1	0	1	1	0

The professional growth and development of a faculty and staff is important to a vocational/technical school since it relies upon them to remain current in their teaching technologies and field of expertise. Table 4.4 evidences that currently employed Gateway faculty participate in various professional development activities. Every faculty member indicated participation in some form of in-service workshop; and 86 percent were involved with conferences and seminars. Continued education, by taking graduate credit by faculty members, amounted to 75 percent of the respondents with some deriving graduate degrees while employed. Among the degrees attained by the faculty, 65 percent have earned masters degrees.

Table 4.4

Gateway Faculty By Age, Highest Degree Attained, and Professional Development While Employed at Gateway

N · 116

	Highest Degree					Professional Development While at Gateway					
Age	No Deg.	BA BS	MA MS	Ed. S.	PhD. EdD.	Grad. Cr.	In-Service	Conf. or Seminars	Field/ Work Exp.	Travel Related	Compl. Degree
20-30	4	10	1	--	--	8	15	11	7	2	--
31-40	6	15	12	2	--	28	35	32	11	10	8
41-50	5	19	16	2	--	30	42	36	21	10	11
51-60	3	10	7	--	--	17	20	18	16	9	2
over 60	1	2	1	--	--	4	4	3	1	--	--
Totals	19	56	37	4	0	87	116	100	56	31	21

Staff members have also continued their professional growth by participating in-service (100 percent); conferences and seminars (96 percent); graduate credit (89 percent); and eleven staff members (40 percent) received degrees while employed at Gateway. Among the degrees achieved by the staff members, 30 percent have earned bachelors degrees while 67 percent have earned masters degrees or above (Table 4.5).

Table 4.5

Gateway Staff By Age, Highest Degree Attained, and Professional Development While Employed at Gateway

N = 27

	Highest Degree					Professional Development While at Gateway					
Age	No Deg.	BA BS	MA MS	Ed. S.	PhD. EdD.	Grad. Cr.	In-Service	Conf. or Seminars	Field/ Work Exp.	Travel Related	Compl. Degree
20-30	--	1	--	--	--	1	1	--	1	--	--
31-40	--	3	5	1	--	8	9	9	1	1	4
41-50	1	--	3	2	--	5	6	6	1	--	2
51-60	--	4	5	--	1	9	10	10	3	4	4
over 60	--	--	1	--	--	1	1	1	1	1	1
Totals	1	8	14	3	1	24	27	26	7	6	11

The Faculty and Staff Survey was conducted to determine attitudes toward strategies that would maximize the utilization of Gateway's resources. The statement: "GTI should perform the following items in order to maintain the high quality educational programs." was asked relative to specific items represented in Table 4.6. The degree of freedom for the responses were: 1 = strongly disagree; 2 = disagree; 3 = uncertain; 4 = agree; and 5 = strongly agree. There was common agreement between the faculty and staff that there is "need to carefully review new program development," and to "offer new and existing programs in different ways." But, the faculty was undecided about "eliminating low enrollment programs" while the staff felt they should be dropped. In reference to "improve present facility utilization," both the faculty and staff agreed that it is necessary to increase the utilization of classrooms and laboratories. Although in relationship to the "need for facility expansion to accommodate program(s)" the staff felt more construction of facilities is needed to accommodate programs while the faculty felt expansion of facilities was not needed. When asked about the "reduction of the number of job outs of various programs," the faculty and staff felt that once a student has gained employment in a field related to their training, the student's goal was achieved regardless if this occurs before graduation or at the completion of a program. To "utilize faculty members

as representatives for the District in recruitment programs," and "increase faculty contact with employers" was a commonly agreed upon response by both the faculty and staff members. In the handling of students with problems resulting from "handicaps, or lower level/limited ability students," the faculty would like in-service training to help them assist these students in their regular courses. Finally, both faculty and staff were in agreement that greater effort needs to be put forth to "improve GTI's image with the public."

Table 4.6

Item Analysis of Variance By Faculty and Staff To The Statement, "GTI Should Perform The Following In Order To Maintain The High Quality Educational Programs."

ITEM	FACULTY	STAFF
Review new programs development	4.2	4.6
Facility expansion to accommodate programs	1.9	3.4
Improve facility utilization	3.9	4.1
Reduce the number of jobouts	2.7	2.7
Increase faculty contact with employees	4.2	4.3
Use faculty to recruit students	4.2	4.4
Educate faculty in helping handicap students in regular programs	3.9	4.0
Educate faculty to instruct lower level/limited ability students	3.8	4.1
Offer new and existing programs in different ways	3.6	4.2
Eliminate low enrollment programs	2.8	3.7
Increase faculty involvement with business/industry either on campus or at business site	4.1	4.3
Improve GTI's image with the public	4.4	4.5

Note: Degree of freedom: 1 = Strongly Disagree; 2 = Disagree; 3 = Uncertain; 4 = Agree; 5 = Strongly Agree.

As student enrollments shift or decline these changes in enrollments impact on the educational programs to the point that certain program offerings run the risk of being dropped. The Gateway District, on a yearly basis, reviews and evaluates selected associate degree or diploma programs that evidence a downward enrollment trend, high student attrition, low placement rate, and high operational costs. During the 1979-80 school year four programs will undergo program review with an outcome consisting of one of four alternatives: strengthen the program, consolidation, modification, or discontinuance. The programs identified for review are: Instrumentation, Stenography, Library Media Technical Assistant, and Radio Broadcasting.

In a question posed to the faculty and staff about the consideration of consolidating, integrating, or eliminating low enrollment programs, there responses were quite mixed (Table 4.7).

Goal Oriented Adult Learning Program (GOAL). It was suggested to consolidate all of the remedial, developmental, and adult high school courses into one administrative unit for a more coordinated effort of operation, and efficient student progression before entering the associate degree or diploma programs.

Stenography (Diploma). It was recommended by the faculty and staff that this be consolidated into the

Secretarial Science Program (Associate Degree) as a student option for an area of program emphasis. As noted earlier, this program is up for an annual review by a program review committee.

Table 4.7

Faculty and Staff Attitude Toward
Associate Degree and Diploma Programs
For Consolidation or Elimination

Consolidation	Elimination
Combine Adult Basic Education, Guided Studies Center, Adult High School, and General Educational Development Test (GED) into a Goal Oriented Adult Learning (GOAL)	Library Media/Technical Assistant
Stenography into Secretarial Science	Stenography
Integrate the concepts, principles and skills of the Instrumentation Program with Electronic Technology	Instrumentation
Supervisors Mid-Management combined with Industrial Engineering Technician	Fire Science
	Food Service Assistant

Instrumentation Program (Associate Degree). The Instrumentation Program has not functioned as a program with a full section of 15 students since its inception in 1970. Students now take their course work in Electronic Technology and take the few specialized courses in Instrumentation to receive their degree.

Ward Clerk (Diploma). It was recommended that the one semester Ward Clerk Program be offered once per year

instead of twice yearly because of reduced student interest, small class size, and high student attrition.

Supervisor's Management (Technician) (Associate Degree). It was suggested that the Supervisor's Management Program be consolidated with the Industrial Engineering Technology. The Supervisor's Program had been developed in conjunction with the American Motors Corporation and Gateway to provide training for foremen, supervisors, and selected production employees during the late afternoon and evenings. Thus far, this associate degree program has had only one graduate with a regular enrollment of ten to twelve students over a five-year period.

Program elimination or discontinuance is accomplished only after a thorough review of recommendations made by the Program Review Committee, Administrative Cabinet, and the Gateway District Board. The suggestion by the faculty and staff to eliminate certain programs was based upon recurring low enrollment. The Library Media Technical Assistant, Stenography, and Instrumentation previously cited are scheduled for a District program review because of recurring low enrollments.

Fire Science Program (Associate Degree). The Fire Science Program was identified for discontinuance primarily because low student enrollments is a recurring problem.

Food Service Assistant (Diploma). This program has had difficulty attracting students because of low occupational wages and heavy emphasis by restaurants for on-the-job training of new personnel.

If programs have to be eliminated and a surplus of faculty exists, then what action should be taken in reaction to this situation? This question was posed to the faculty and staff requesting that they rank order their responses or offer an alternative. Table 4.8 indicates that there was relatively common agreement in the first and second choices given by the faculty and staff to "maintain full-time assignments, but eliminate positions whatever required by reduced enrollments" and "consider moving to another district where a position may exist." There was a mixed reaction on the third choice with a faculty preference of "working part time as an instructor with the balance of work week devoted to work in a related business/industry." The staff's third choice and the faculty's last choice was to "reduce assignments for all full-time faculty affected by the enrollment decline."

There were other first choice alternatives expressed by the faculty and staff that showed a common agreement for "an all out recruitment effort of students," and to "use day and evening assignments to make up a teaching load." The faculty suggested a "reduction in the part-time faculty," which would normally take place before a reduction of

full-time faculty would occur. Other first choice suggestions called for "those faculty affected by reduced workloads would devote the balance of time recruiting students, or developing special trade extension courses, workshops, and seminars."

Table 4.8

Rank Order of Faculty Perception of Action To Be Taken In Response To A Reduction In Enrollments

Rank		Response
Faculty	Staff	
1	1	Maintain full-time assignments, but eliminate whenever required
2	2	Consider moving to another district
3	4	Consider working part-time as instructor and in business/industry
4	3	Reduce assignment for all present full-time instructors, with reduced pay spread over all instructors affected

The faculty and staff were then asked questions intended to elicit personal responses for opinion on the usage of various resources or activities performed within the District. The categories developed from the responses were not predetermined but created from the narrative responses received by the respondents.

The first question asked: "How can present existing laboratories and classrooms be more effectively used?"

Scheduling. An increase in utilization could be realized if there was scheduling of more late afternoon classes, and by opening labs from 8:00 a.m. to 10:00 p.m.

with lab assistants to facilitate business/industry needs for short-term training as well as usage by handicap, or lower level/limited ability students. Where it is practical, consolidation of labs for the same programs and location on one campus instead of two. Scheduling like courses together and strive for more flexibility by instituting shorter course length instead of full semesters.

Educational Innovations. There was uniform agreement expressed by the faculty and staff that to achieve greater facility utilization new and creative approaches for program delivery was necessary. Suggestions like "weekend college," or more "business/industry conferences, workshops, seminars, short-term intensive programs," and "more utilization by Community Services during the day." In order that an organized approach be established it was suggested that a task force committee of facility utilization study and recommend a plan for the District.

Instructional Equipment. Approximately ten percent of the respondents expressed concern that instructional equipment needs to be updated and kept in good working order. Suggestions offered to alleviate the concern considered lease or rental of expensive equipment and the employment of lab assistants that would repair and maintain the equipment. The constraints that have hindered purchasing up-to-date equipment has been the inflationary

costs, state cost controls, and the rapidly changing technologies. Thus, present instructional equipment should be closely monitored for preventive maintenance by lab assistants that can repair as well as provide basic instruction on the equipment use. The long-term savings resulting from employment of lab assistants would eventually be realized from longer life of equipment, reduction in student abuse, and regular preventative maintenance checks.

A second question asked the respondents was: "How can the faculty be better utilized to recruit students?" This question was a follow-up to the earlier statement asked: "Utilize faculty members as representatives for the District in recruitment programs," which both faculty and staff were in agreement. The narrative responses became identified as either divisional or District-wide recruitment which were then used as categories for the responses.

Divisional Recruitment. Faculty members realize they need to become more involved in the District's recruitment efforts by taking a more active role. The faculty felt that recruitment should become a part of their workload formula. Staff responses also agreed that faculty participation is essential due to broad and diverse program areas administered by coordinators, but that limited release time be provided for recruitment and placement of students.

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The faculty felt that if the "Program Chairperson" positions were reinstated, opportunities for recruitment and placement could be assigned as a portion of those job duties within each division. Then through the formation of a faculty team approach with representatives for different career clusters, effective recruitment efforts could be formulated when visiting high schools, businesses, industries, and agencies. It was suggested by both faculty and staff that faculty members should follow-up prospective student inquiries that were received by Student Services, as well as be available to meet with parents to discuss program training and placement opportunities.

There were several faculty and staff member responses indicating that the faculty should become more visible in the community through such techniques as a speakers bureau, college night, and special public functions where potential students and employers may be recruited. There was common agreement that program advisory committee members need to be better utilized by joining forces in the recruitment of potential students.

District-Wide Recruitment. By having a multitude of approaches to student recruitment, greater opportunities exist in reaching a variety of student markets. Responses came forth that suggested conducting on-campus program demonstrations that would result in a better understanding

of the actual training skills, job features, and opportunities for high school counselors, potential students, and parents. Another technique suggested was to use the Adult Basic Education mobile classroom van for selected neighborhood locations to perform registration and recruitment activities. This is a very reasonable suggestion considering the van is used for recruitment at county fairs and its use could be expanded dependent upon availability of time.

Finally, by establishing a permanent District committee on recruitment, appropriate emphasis could be given to reviewing practices and suggestions of yearly plans for recruitment.

The third questions asked: "What can be done to improve student retention in the District?" This question appraised attitudes increasing enrollments by retaining existing students.

The faculty and staff felt that student interest and desire for learning would be enhanced if instructors improved the quality, variety of learning methods, and relevance of instruction; as well as become more interested in the student as a person giving more personal attention and a caring attitude. Through the efforts of the District In-Service Committee, appropriate topics in humanizing education could result in greater faculty awareness of student needs aside from educational needs.

There was a general opinion expressed by the staff and faculty that the District's "open-door"policy has created a higher attrition rate due to all students being allowed to enter programs of their choice even though they may have an inability to handle the academic rigor or skill requirements. Thus, it would be appropriate with remedial educational programs and tutorial services already available, students could "brush up" or improve their academic or skill development to a successful level before entering programs.

The faculty responses stressed more counseling and guidance services need to be provided for incoming students in the way of assessing their academic and skill abilities; and thus enabling better vocational and program choice to insure greater student success. There was a concensus of opinion that incoming students need closer attention during their first six to eight weeks and to accomplish this the following should be established:

> "Faculty Advisory System" creating student student-faculty scheduled meetings to ease the transition and adjustment in the learning environment.
>
> "Campus Life Adjustment Committee" that would coordinate small group counseling sessions between students and counselors.
>
> "Student Exit Interview" that once a student has decided to "job out" or "drop out" an exit interview between the student and a counselor to assess what caused the withdrawal, and to see if another program is more suitable, or special tutorial assistance is needed.

Additional services were recommended that should be available to students were: expanding the Guided Studies Center and Developmental Program to assist evening students needing special help and refresher work in math and reading skills; add the work experience or internship component to appropriate programs; and establish special help periods in the Guided Studies Center to assist groups of students needing remedial assistance.

The fourth questions asked: "How can GTI improve in its relationship with business/industry?" This question attempted to draw out faculty and staff opinions that could foster improve improved relationships with major clientele for services.

There was a majority concensus of opinion by faculty and staff that by maintaining the quality of graduates, and by expanding the yearly visits and contact relationships with business/industry and agencies could grow and improve. That by distributing public relations materials early enough, followed up with a personal contact to appropriate organizations, relationships would develop. Involvement can be further enhanced by extending personal invitations to business/industry leaders during Gateway events, by encouraging faculty to use more community resource people in their classes; and by providing an "exposition" area on each campus for rotated displays of local products produced.

Develop an articulation plan with selected businesses/industries that would encompass the following: an assessment center that would test vocational skills and aptitude for new or promotable employees; placement of students into work experience or internship positions while enrolled in associate degree programs; and an exchange program for sharing technical assistance.

The final question provided the respondents the opportunity to comment on any topic related to improving the utilization of the District's resources. Their responses covered a wide range of topics and in some cases expanded earlier statements discussed. There was commonality in statements developed in several areas dealing with faculty and instructional improvement. Both the faculty and staff felt that instructors should be required by District policy to remain current with their business and industry skills. It was also noted that general education instructors should visit labs to view what their students are doing so they can stay in harmony with the world of work. Also, greater care should be exercised in the selection, supervision, and evaluation of part-time faculty members to insure effectiveness, consistency, and quality of instruction.

In order to accommodate part-time students, development of associate degree programming over a five- or six-year period of time was proposed. Plans of this nature were developed but are loosely adhered to, prohibiting student

completion as well as part-time student long-range planning of educational programs. Services now provided full-time students should also be available to part-time evening or weekend students, i.e., Guided Studies, Developmental Program courses.

The other topic where suggestions came forth dealt with the faculty/staff relationships that developed from collective bargaining agreements. As a result of two major negotiated contracts in the past eight years; one reaching the informational picketing and potential strike stage; with the 1978 and 1979 contract ending in an arbitrated decision, faculty morale is at a very low state. Efforts to restore the relationship between faculty and staff are important to develop the team attitude in pulling together for the common good of the student.

Business and Industry Survey

The Business and Industry Survey was based upon a stratified sample of 50 businesses that had 50 or more employees, and 50 industries that had 100 or more employees located within the Gateway District. The purpose of the survey was to determine the current type of employee training; employers training assistance; and determination of Gateway's assistance in satisfying employer training needs. The survey results showed a 78 percent return, which was derived from the two mailings of the questionnaire. A

review of the respondents revealed a 70 percent return from the 50 industries and 86 percent return from the 50 businesses surveyed. Table 4.9 shows a profile of businesses and industries by the activities performed, number of full-time employees, and the percent of the total response. Industrial/manufacturing accounted for 45 percent of the respondents, while hospital, medical, and dental establishments represented 10 percent to the total response.

Table 4.9

Profile of Businesses and Industries By Activities, Number of Full-Time Employees, and Percent of Response

N = 78

Activities	Number of Full-Time Employees							Percent of Responses
	0-50	51-100	101-500	501-1000	1001-2000	2001-5000	over 5000	
Banking & Finance	3	2	2	--	--	--	--	9
Construction	--	--	2	--	--	--	--	3
Gov't., Fed., St., Local	--	1	3	--	--	--	--	6
Hospital and Medical	--	--	3	5	--	--	--	10
Hotel and Motel	1	1	--	1	--	--	--	4
Industrial and Mfg.	--	--	16	10	4	1	4	45
Printing	--	--	--	--	1	--	--	1
Retailing	2	2	2	--	--	--	--	8
Service Establishment	--	1	--	--	--	--	--	1
Transportation	4	--	1	--	--	--	--	5
Utilities	--	--	--	1	--	--	2	8
Totals	10	7	29	20	5	1	6	100

Table 4.10 indicates that training is a widespread responsibility and that typically, no one individual has the responsibility because of the diverse training skills required. Actual training and instruction to employees is

guided or coordinated by typically a training officer who seeks assistance from qualified internal as well as external personnel.

Table 4.10

Employees Responsible For Training or Who Shares Responsibility With Other Duties

Number Responsible	Response Frequency	Number Responsible	Response Frequency	Number Responsible	Response Frequency
1	9	7	1	20	1
2	9	8	3	25	1
3	13	10	6	29	1
4	8	11	3	36	1
5	3	12	3	37	1
6	4	15	2	65	1
				100	2

Companies that are performing the training function for employees prefer on-the-job training (90 percent) over mini-courses (59 percent) or in-service seminars (56 percent). When asked what type of program(s) they operate on a formal basis, they responded in the following order of frequency.

Type of Program	Frequency	Percent
Supervisory Training	51	65
Apprenticeship Training	26	33
Technician Training	24	31
Job Upgrading	24	31
Executive Development	23	29
Sales Training	3	4

Businesses and industries expressed as the reason(s) for operating their own internal training programs were for the following in order of frequency because it can be conducted under close supervision due to time constraints and uniqueness of equipment.

Type of Reason	Frequency	Percent
Skill Development	50	64
Convenience	32	41
Management Development	28	36
Unique Product	27	35

The 78 business and industry respondents said that with the assistance of Gateway, they would like to either continue or implement the following training programs in order of frequency of their response.

Type of Training	Frequency
Supervisory Training	35
Technician Training	23
Apprenticeship Training	20
Job Upgrading	19
Executive Development	13
Plant Management	4

In order to gain an understanding as to where the respondents seek assistance in training their employees, they were asked what source(s) provided training to their

company. The following is a list of responses as to sources of training in the order of the respondents' frequency of response.

Source	Frequency
Gateway Technical Institute	47
American Management Association	27
University of Wisconsin-Parkside	26
Manufacturers and Employers Association	26
Carthage College	8
Parent Company Training	7
University of Wisconsin-Whitewater	6
University of Wisconsin-Milwaukee	3
University of Wisconsin-Extension	2
American Red Cross	2
Milwaukee School of Engineering	1

In an effort to assess what companies do to provide incentives for employees that are taking training, it was determined there were 58, or 74 percent, of the companies that have a tuition reimbursement policy for employees to pay their expenses. Given that a tuition reimbursement policy exists, the next effort was to determine the extent of employee utilization of that policy. Table 4.11 shows the employees by size of company that took advantage of the tuition reimbursement benefit.

Table 4.11

Employees That Used The Tuition Reimbursement Benefit For Training

Size of Company	Number of Employees Used Benefit					
	0-5	6-10	11-25	26-50	51-100	over 100
0-50	1	2	--	--	--	--
51-100	2	1	--	--	--	--
101-500	12	4	5	--	2	--
501-1000	1	3	6	5	2	2
1001-2000	1	--	2	--	--	3
2001-5000	--	--	--	--	--	1
over 5000	--	--	--	--	--	3
Totals	17	10	13	5	4	9

It appears that not many employees take advantage of their company's policy to take additional training on a voluntary basis. An attempt was made to place numerical values on its use by using the maximum range of numbers to determine how many potential employees existed in the 58 firms. There were 62,950 employees of which 2,060, or three percent, of the employees used that tuition reimbursement benefits.

In addition to tuition reimbursement policies, employers also provided employees with the opportunity to attend external education centers on released time from the job as well as internal courses on company time. It appears that the importance of the training dictates the approach used by the company because multiple responses were given relative to the methods used to accommodate the employee (Table 4.12).

Table 4.12

Methods Employers Use To Accommodate Employee In Training

Method of Accommodation	Size of Company 0-50	51-100	101-500	501-1000	1001-2000	2001-5000	over 5000	Totals
Expect employee to get training after work hours at own expense	3	4	17	12	4	1	3	44
Provide internal courses on company time	5	3	10	13	2	2	4	39
Release time from job to attend external education center	4	6	14	8	2	--	4	38
Share release time between company and employee	1	1	4	7	2	--	2	17

The results of the survey found how Gateway can effectively aid business and industry in providing more meaningful services and training programs. A group of statements were developed relative to areas of cooperation between Gateway and businesses/industries, plus the respondents had an opportunity to offer suggestions they felt appropriate. The following were their responses in order of frequency:

Areas of Cooperation	Frequency
Provide business and industries with technical information upon request relating to instructional program content.	37
Have a school coordinator visit periodically to discuss training needs.	28

Areas of Cooperation (cont.)	Frequency
Allow selected students to take part in cooperative training programs.	21
Have instructors work part time in business/industry in order to keep current on skills and concerns of business.	18
Have a training specialist from your company serve on an occupational advisory committee.	17
Have a company training representative available as a resource person to review programs in your speciality.	12
Have Gateway audio-visual library available for industrial use or develop a school/industry film library.	1
Get information on courses to companies earlier.	1

It had been noted earlier that 56 percent of the business and industry respondents stated that they "expected employees to get training after work hours and at their own expense." Thus, knowing that a pool of potential students would be employed and working during the day time, two open response questions were posed to elicit information relative to total hours per week, or whether flex-time, or task assignments would be used to determine work week length in the future.

In the first question asked: "During the 1980's, do you anticipate any changes in the total work hours per week?" the respondents replied:

No	53	Would change if national conditions change or industry. Have reduced
Yes	7	to 35 hours per week.
No Reply	16	

The second question referred to the hours employees work and their potential availability after work hours. Business and industry respondents were asked: "Has your company or business given any consideration to methods such as flex-time or task assignments for determining employee work week?" They replied with the following responses:

No	48
Yes	9
No Reply	19

The last two questions asked the respondents to examine the job skills/training level of entering employees, and in what way could Gateway meet their occupational training needs. In the first question: "What is your assessment of the job skills/training level of entering employees?", there was a common thread running through their responses; namely: job skills/training level of entering employees was marginal or less than adequate; that the basic skill of reading, math, and writing are weak; that entering employees lack an understanding of the "work ethic" and "employer expectations"; and that they lack "practical training or exposure" to industry requirements.

In the final question: "In what way can educational facilities of GTI meet the occupational training?", replies

varied considerably so that the best representation would be to list individual responses.

Establish specialized courses for construction supervisors.

Provide skill development classes for "changeover" employees, aside from apprenticeship programs.

Determine the technical need for each industry in the area and offer courses where there is the greatest potential.

Provide more training in blueprint reading, shop math, and drafting.

Provide teller training course for banks and savings and loans.

Provide a basic research course for supervisory personnel.

Provide more courses for supervisory and management personnel.

Direct more training toward the health field.

Provide police in-service training to update experienced officers.

Train more on employer expectations, i.e., attendance, dress, poise, and courtesy.

Plan annual visits to industries and see what is done on the inside to keep abreast.

Increase programming options. Break away from traditional academic scheduling.

Send more detailed information outlining available courses specific to their industry.

CHAPTER V

SUMMARY, MAJOR FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

During the period of "infancy" in the community college movement, from the 50's and continued through the early 60's, community colleges were seen as "second-class" citizens in the postsecondary scene, providing classes for less qualified students, the vocationally oriented, the financially poor, and for those who could not get into the established institutions. Then during the "solvent sixties", the student consumers identified the community college as an "alternative" with abundant opportunities, providing a chance to start college at minimum cost, innovative programs, and available at convenient locations. Students learned; were satisfied; saved money and time; and told their friends. While traditional colleges selected students, community colleges served students. Enrollments in community colleges climbed to a point in 1975 that the National Center for Educational Statistics reported one-half of all freshmen were attending public two-year colleges. Approximately 36 percent of all enrollments in postsecondary education were in community colleges.

The law of student supply and demand dealt a sudden blow to community colleges when the 1976 fall enrollments remained nearly the same as for the previous year. This was the first time in twenty years that continued upward enrollment figures were not evident. In some community colleges, located away from population centers, enrollment decreases of ten to twenty percent were recorded.

Enrollments could no longer be taken for granted. This single factor changed the directions of community colleges because it had a tremendous impact on a college's total fiscal stability. Full-time, part-time, continuing education--total credit hours were all tied directly to finances. A hard look had to be given to the bottom line cost. Taxpayers began asking questions, bond issues and referenda were defeated, and some assumed an adversary role. College Board test scores and writing/reading skills were declining. This combination of conditions, along with faculty unrest, inflation and the energy crisis, placed education under a microscope.

As the 70's draw to an end, a number of factors have surfaced which were contributing to the decisions made by potential students in regard to seeking advanced educational training. Among the more influential factors were: changing attitudes among the various public sectors concerning perceived values to be gained from investments required for educational services; termination of benefits from the G.I.

Bill; the military demand placed on the declining birth rate pool of eligible citizens; reduced numbers of high school graduates created by a lower national birth rate; competition from civilian employers; increased recruitment emphasis exhibited by colleges and universities; competition from privately funded postsecondary skill-training institutions, and the decisions being reached by many individuals to seek employment or travel prior to settling into a college training program.

Nathan Glazer (1977:18), educator-sociologist of Harvard University, has summarized the consensus of opinions offered by twenty-six prominent educators in the book, The Third Century. The most prominent trends projected about the future of higher education were the increasing importance of lifelong learning; the growing concern for equality of opportunity and of institutions; the impact of continued government intervention, which is closely aligned with the egalitarianism theme; and the "graying of America" will continue to grow over the next two decades.

The problem has been that technical institutes in the state of Wisconsin have been experiencing a decline in full-time student enrollments. Gateway, which is a part of this statewide system of technical institutes, has also experienced this student shift. Therefore, the purpose of the study was twofold: to identify the effects declining or shifting enrollments have on the institutional management

of Gateway's resources; and to develop recommendations to reduce the impact on each of these resources. District resources were referred to as something that lies readily available for use or can be drawn upon in an emergency to deal effectively with problems, i.e., wealth, property, faculty and staff.

The major objectives of the study were:

1. To collect existing data and information available for determining the extent and impact of declining enrollments at Gateway.
2. To identify potential student target groups and develop the appropriate recruitment strategies.
3. To determine faculty and staff development, retraining, and shifts in the workday hours to accommodate changes in student attendance hours.
4. To determine from business and industry how Gateway could attract their employees to better their manpower training needs.
5. To develop recommendations to reduce the impact of shifting or declining student enrollments on the Gateway District's resources.

The study was limited to the operations, full-time faculty and staff, and business and industries geographically located within the Gateway District. The procedure developed determined the faculty, staff, business, and industry perceptions of how Gateway can utilize its

resources during a period of shifting or declining enrollments. Two surveys were conducted to determine from Gateway personnel and the business and industry constitutuency, methods or alternatives in combating the future enrollment changes. The entire faculty and staff of 215 full-time employees were surveyed yielding a total response of 66 percent. A survey of business and industry was conducted that consisted of a stratified sample of 50 businesses having 50 employees or more and 50 industries employing 100 or more. The survey resulted in a 78 percent response. Both survey instruments were subjected to a review by a panel of experts consisting of six faculty members and three cabinet level administrators as represented in Appendix A. The validity of the instruments was determined by this panel of experts to determine the property of the instruments to measure that for which they were designed. As a result, recommended modifications were made to each survey instrument that was then field tested by a test sample of five faculty members, and five businesses and five industries represented in Appendix B, along with cover letters sent to the respondents as presented in Appendix C.

Data derived from the Faculty and Staff Survey was used to develop a profile of the 143 respondents as to their age, total years of experience, years employed at Gateway, related work experience, current degrees, and professional development since their employment at Gateway. An analysis

of variance was conducted between the faculty and staff responses from the 12 subparts to the statement: "GTI should perform the following items in order to maintain the high quality educational programs." Respondents were also given the opportunity to prioritize by ranking options available to faculty and staff during a period of declining enrollments. Specific open-ended questions drew faculty and staff narrative responses relative to the treatment of Gateway's resources.

Data received from the Business and Industry Survey was used to develop a profile of the 78 respondents by classified types of the firm's activities and the number of full-time employees. Data was summarized by the frequency count and percentage of response to each item received as to the extent of company training effort, type of source of training for employees, the company training incentives for employees, and more effective aid to business and industry in their training effort. Concise open-ended questions were asked to derive future work force change, and the respondents' perceptions relative to the assessment of job skills/ training level of entering employees.

The significance of this study was evidenced by the fact that the student population at Gateway has shifted with a decrease in full-time students and an increase in part-time students. This shift in student population to half days or evenings has affected the utilization of faculty and

staff assignments, facilities, and reduced revenues derived by Gateway. Thus, management strategies to cope with these and other future changes will require advanced planning for effective decision making.

Major Findings

Based upon the information gathered and data analyzed, the major findings with the greatest impact upon the Gateway District are as follows:

1. The future pool of postsecondary students rests with the "nontraditional" student who has been identified by Kyle (1978:2) as: 25 years and over; part-time student; non-family dependent; coming from all socioeconomic groups; all racial groups; male/female about even; in the labor force or about to join it; and may attend two or more institutions to complete a degree. The "traditional" student identified as being: 18 to 24 years old; a full-time student; family dependent; middle/upper socioeconomic groups; predominently white; predominently male; not in labor force; and completes a degree at one institution has been dwindling in actual total numbers.

2. The state of Wisconsin had experienced a decline in the number of births in 1960's and 1970's so that the pool of 18 and 19 year olds were projected to decline during the next decade and between 1980 and 1992 will amount to 38,000 or a 38 percent reduction in the number of 18 and 19 year olds. As a result of this decline, the Gateway District will experience a 12 percent decrease, equivalent to 828 of high school graduates between 1980 and 1985, as well as a further reduction of 501, or 8 percent, from 1985 to 1990.
3. To combat the decline of "traditional" students and to recruit this new group of potential students now considered "nontraditional" will require new approaches. It was found in the Faculty and Staff Survey that both the faculty and staff agree that there needs to be a careful review of new programs developed and to seek ways in offering existing programs in new and different ways. By trying to recruit this "nontraditional" student will mean giving them appropriate credit for achievement based upon experience of nonformal study. Finally, in order to accommodate this part-time student will require the development of associate degree

programming over a five-year or six-year period of time and by also providing remedial education services in the evening.

4. The "open access" or "open-door" policies have attracted many new and poorly prepared students as evidenced by faculty and staff comments and presented in research conducted by Martorana and Kuhns (1978:33). These lower level/limited ability students have need for more counseling, remedial courses, and self-concept development. It was found in the Faculty and Staff Survey that more counseling and guidance services are needed to be provided for incoming students in the way of assessing their academic and skill abilities, thus enabling better vocational and program choice to insure greater student success. The most critical time for incoming students has been the first six to eight weeks and by establishing a "Faculty Advisory System" creating student-faculty scheduled meetings to ease the transition and adjustment in the learning enviroment. A supplement to this system would be an "Early Warning System" that would detect students experiencing problems for referral to appropriate programs or services.

5. It was found that both faculty and staff had the opinion that once a student had gained employment in a field related to their training, the student's goal was achieved regardless if this occurred before graduation or at the completion of a program. By establishing work experience, or an internship program, students should be encouraged by faculty and staff members to continue their educational training. That the retention of students enrolled in programs should be the goal of Gateway not a by-product. By retaining the present student enrollment, increases can be realized between semester and years.
6. Faculty members realized that they need to become more involved in the recruitment effort by taking a more active role. The faculty attitude expressed, indicated recruitment efforts performed by them should be part of the workload formula. Some faculty involvement may be: follow-up of prospective student inquiries, greater visibility in the community through a speakers bureau, and more contacts with employers as a representative for recruitment.
7. A finding from the Faculty and Staff Survey was the necessity for establishing a permanent

District Committee on recruitment, so appropriate emphasis could be given to evaluating practices and designing yearly plans for recruitment.

8. Faculty and staff reductions and authority struggles have become vital issues because of the combination of circumstances facing post-secondary education, namely: declining enrollments, declining financial support, inflation, low faculty turnover and changing student interest with regard to programs and courses. It was evidenced in the Faculty and Staff Survey and by studies of Uehling (1978:378), Kappen (1978:23), and the Carnegie Report (More Than Survival, 1975:19) that faculty morale was low due to authority struggles and greater efforts to participate in the affairs of the institution by faculty. The diminished job mobility and advancement opportunities at Gateway have created a maturing faculty with a modal age of 41-50 and a staff modal age range of 51-60 years old. This finding was consistent with studies conducted by Kappen (1978:23), Uehling (1978:384), and the Carnegie Report (More Than Survival, 1975:13).

9. The Faculty and Staff Survey also revealed that Gateway personnel prefer, when reduction in force becomes necessary, that full-time assignments be maintained and to eliminate positions wherever required by reduced enrollments after the following: an all-out recruitment effort of students; that by using day and evening assignments to make up a teaching load; reduction of part-time faculty before full-time faculty are terminated; faculty affected by reduced workloads devote the balance of time recruiting students or developing special extension courses, workshops, and seminars. When reduction is necessary, less problems result if faculty participate in policy development, receive early warning of possible reductions, and are given an opportunity for reassignment according to Lombardi (1974:8). Reduction in faculty and staff can be accomplished by: recapturing vacated positions, hiring temporary and part-time faculty members, increasing joint appointments between departments, and provide opportunities for early retirement on a full-time or part-time basis (Carnegie Report, More Than Survival, 1975:93).

10. Since professional growth and development of a faculty member is important to a vocational/technical school, then instructors should be required by District policy to remain current with their business/industry skills. Efforts of the District In-Service Committee should be directed toward the topics relative to humanizing education by instilling faculty awareness of student need aside from educational needs. It was found in the Faculty and Staff Survey that instructors would like in-service training to assist students with handicaps or lower level/limited ability in their regular classes.
11. Relationships between Gateway and business/industry can continue by maintaining the quality of graduates and by expanding the yearly visits and contacts. Also by developing an articulation plan with selected businesses/industries for employee assessment, training, placement of graduates, student work experience or internship, and an exchange program for sharing technical assistance.
12. It was found in the Business and Industry Survey that the training taking place within companies is a widespread responsibility and that typically, no one individual has the responsibility

because of the diverse training skill requirements. Actual training and instruction to employees is guided or coordinated by a training officer who seeks assistance from qualified internal as well as external personnel.

13. Companies that perform the training function prefer on-the-job training for employees because it can be conducted under close supervision, be initiated within a time constraint, with experience on their unique equipment or process.
14. Businesses/industries would like Gateway to initiate or continue offering courses in supervisory training, technician training, and job upgrading. Also, with the large number of trainers involved in the training of employees, courses on how to train workers would appear to be very appropriate.
15. Employee usage of their companies tuition reimbursement plan appears to be minimal when pursued on a volunteer basis. Companies also provide release time from the job to attend external education centers, but the importance of the training dictates the approach used by the company.

16. It was found that Gateway could assist business/industry with technical information upon request relating to instructional program content. This could be accomplished by having school coordinators visit periodically to discusss training needs and technical assistance.
17. Business/industry have expressed concern that entry level employees have marginal or less than adequate skill levels, that their basic skills of reading, math, and writing are weak, and they lack an understanding of the "work ethic" and "employer expectations".
18. As finances become tighter more effective management practices will have to emerge as well as improved economizing measures in instruction and programming practices. Efforts to improve the utilization of facilities could lead to savings if operations fcr preventive maintenance were implemented as well as improvements in scheduling flexibility for student course selectivity. This was found in the Faculty and Staff Survey and compatible with Shirley's (1975:44) study and William Keough (Eisenberger, 1978:36).
19. There was uniform agreement by faculty and staff that new and creative approaches for program delivery will mean greater facility utilization.

More late afternoon classes could be scheduled and when labs are not in use by classes then establish open labs with lab assistants monitoring student activities. This open lab arrangement could facilitate use by business/industry as well as usage by handicap, low level, or limited ability students. With increased usage, instructional equipment should be closely monitored for preventive maintenance by lab assistants that can repair as well as provide basic instruction on the equipment usage. The long-term savings resulting from employment of lab assistants would eventually be realized from longer life of equipment, reduction in student abuse, and regular preventive maintenance checks.

Conclusions

Based upon the major findings, the following conclusions were advanced:

1. The extent of the "traditional" student pool can be projected with relative accuracy because the births have already occurred for the next ten years. It appears that a 12 percent decline in high school graduates will occur from 1980 to 1985, and a further decline of 8 percent from

1985 to 1990. Even though the numbers of potential "traditional" students are declining, efforts to recruit this student must continue and even become more creative in light of increased competition for these fewer graduates by colleges, universities, military services, and business and industry. Attention must now be focused on the "nontraditional" student who will constitute the major source of student enrollments at Gateway for the next several years. The "nontraditional" student will be looking for and expecting the granting of educational credit toward a degree for appropriate achievement based upon experience or nonformal study. The "nontraditional" students will also apply pressure for program offerings to be scheduled and adhered to over a five- or six-year period so they can plan their program and receive the degree. Pursuing an educational degree over this length of time runs the risk of being sidetracked or interrupted; thus, the District must work hard to maintain a high student motivation and interest. The concept of "stopping out" and "lifelong learning" will play a greater role in dealing with the mass numbers of "non-traditional" students. Therefore, the marketing

process of product, promotion, delivery, and evaluation will play a vital role in achieving the District's mission, which is providing educational programs or services for persons 16 years of age and over with less than a baccalaureate degree. With such a broad institutional mission, the wise utilization of resources will force the need for a priority system.

2. A broad approach to recruitment of students will need to be utilized in order to reach out to the multitude of market segments (various) potential student groups. As the competition for students intensifies, driving up the cost for recruiting, efficient methods and approaches can be gained by utilizing marketing techniques, and involving the entire faculty, staff, and advisory committee members. It was evidenced that the faculty and staff want involvement not only from a personal interest but from a growing concern of being unemployed in the future. Faculty involvement activities could include follow-up on student inquiries; rendering of public presentations to potential student segments; and assistance in contacts with business and industry. Faculty efforts to recruit students should

be coordinated out of the Student Services Division. In addition to the coordination of activities, the formation of a District Recruitment Committee should be established that could assess and evaluate the utilization of resources expended on the recruitment of students. Thus, the importance of successful, efficient, cost effective student recruitment will dominate the District's efforts in the 1980's

3. The "open-door" policy at Gateway has attracted many students from all educational levels of attainment. It was evidenced in the Faculty and Staff Survey and other recent studies that students need more: counseling and guidance services; alternative curriculum and delivery system; faculty attention and motivation; and encouragement to become a successful participating student. A review of student assessment procedures and career guidance requires more viable methods because of current student trends evidenced by lower basic skills and the reentry back to education by older students. Faculty in-service training should stress the humanizing of education beyond the educational setting and assist faculty in working with handicap, disadvantage, or lower level/limited ability students.

4. The potential of declining or shifting student enrollments poses a real threat to the job security of faculty and staff. When job security is questionable, recent studies have indicated increases in authority struggles and greater efforts to participate in the affairs of the institution by faculty. Reduction in faculty and staff can be accomplished in several ways: recapturing vacated positions, hiring temporary and part-time faculty members, increase joint appointments between departments, and early retirement on a full-time or part-time basis. When partial workloads become apparent due to student reductions, faculty members should pursue one or both of the following types of activities that can generate students: develop and implement a one-semester plan for student recruitment; or recruit, develop, and implement a trade extension workshop appropriate to business and industry needs.
5. Professional growth and development of a faculty or staff member is very important to a vocational/technical school such as Gateway. Participation by Gateway personnel in in-service training was excellent as well as course credits toward an advanced educational degree. It was

in the Faculty and Staff Survey that respondents called for the need for faculty to remain current with their business and industrial skills. Presently, faculty can gain Wisconsin Board of Vocational, Technical, and Adult Education certification for their work experience of at least 4,000 hours in a field related to the certification. There are other educational requirements for certification requiring a renewal every five years with successful completion of six educational credits. In view of the changing technologies, worker skill performance and job expectations, faculty members should be required to refresh their skills within the five-year recertification period. Educational institutions may argue they would lose good faculty to businesses and industries, which is a peril that always exists, but providing quality and relevant educational programs and services has to be the foremost concern. The necessity for such a policy can only be determined after a thorough study of the recency of faculty-related work experience.

6. Business and industry performs widespread training efforts with their own employees during the work day. They prefer the on-the-job training

mode because it can be conducted under close supervision, and begun immediately, with their specific equipment or process. Gateway could assist in the training of business and industry employees by conducting offerings on supervisory training, technical training, and job upgrading. Also, with the large number of trainers involved in training employees courses on how to train workers would appear to be very appropriate. Business and industry has requested the use of technical information and assistance on how to train for specific skill(s). By providing training guidance and assistance to their training officers or supervisors, Gateway can improve upon their effectiveness.

7. Evidence that the pool of "nontraditional" students are typically in the labor force during the District's prime daytime hours, when full-time faculty are working, efforts to draw upon this student pool will be necessary to maintain full classes and better utilization of facilities. The development of a cooperative articulation agreement will be necessary between selected business and industry and Gateway calling for employee assessment of skills, training, student work experience or internship, and an

exchange program for sharing technical assistance. If the "nontraditional" student cannot be drawn to Gateway during the daytime hours, then the prime time will be shifting to late afternoon and evening hours with faculty workloads shifting tc compensate for this demand. Faculty starting times may need to be staggered in order to provide competent, instructional coverage for training.

8. The revenue derived to finance technical institutes has been controlled by two major factors, namely: Full-time Equivalent (FTE) student; and state cost controls restricting the maximum increase a district can levy on local taxes. Payment for FTE's is based upon a district's FTE projection one year in advance, so state aids are paid upon the projection, if FTE's decline below the projected amount, state penalties are imposed forcing the district to pay back the over expenditure. Thus, with the potential of FTE's declining and total budgets being squeezed by double digit inflation, economizing measures must be instituted for effective use of personnel and for the utilization of facilities, and instructional equipment which may have to last longer periods before replacement or repair can

take place. Effective management practices as well as economizing measures in instruction and programming will be vital factors for a district to remain solvent and prosper.

Recommendations

Based upon the major conclusions from the major findings, the following recommendations have been generated:

1. Develop a specific course that would be offered for credit that "nontraditional" students prepare their appropriate documentation for experience or nonformal study when requesting advance standing.
2. Develop a curriculum plan for each associate degree and diploma program for part-time students to plan their educational program and receive their degree within a prescribed length of time.
3. Involve faculty in student recruitment to the point of following up on student inquiries, presentations to public segments, and assist in business and industry contacts. In order that the number of faculty participating in the recruitment effort is manageable, one faculty member per program be designated to work with Student Services Division to handle these

requests. Increase recruitment effectiveness and understanding of Gateway programs and services by conducting an in-service training program by the Student Services Division.

4. Establish a permanent District Recruitment Committee consisting of faculty, staff, clerical, and administrators. The major focus for this Committee would be the development of a marketing plan for student recruitment on a yearly basis. Another function would be to assess and evaluate the effectiveness of District resources used in the recruitment effort.
5. The "open-door" policy provides equal access to educational programs by prospective students to the point that student abilities may be considered minimal. In light of current student trends evidenced by lower basic skills and the reentry of older students back to the educational scene, there is need to develop better assessment testing of student basic skills in reading, writing, and mathematics.
6. Conduct in-service training for faculty on: developing a positive student attitude toward the "work ethic" and "employer expectations"; the teaching of handicap, lower level, or limited ability students in regular programs; and the

humanizing of education by developing a faculty awareness of student needs beyond the educational needs they possess.

7. Establishing a Faculty Advisory System with scheduled meetings between the student and an assigned faculty member from the student's program area. Faculty efforts in student retention are extremely critical during a student's first eight weeks of attendance. Discussions would center around the student's academic adjustment within the program and career goals. Records of these meetings should be forwarded to Student Services Division for review or follow-up.
8. Establish an Early Warning System that would detect students experiencing academic or personal problems for referral before they drop out from a program.
9. Investigate the feasibility of a work experience or internship program as a programming option so students gain additional practical experience as well as improve upon the retention rate of students "jobbing out".
10. Reduce faculty and staff position only after an all-out effort to recruit students has failed.
11. Establish an Early Retirement Plan on a full-time or part-time basis. The majority of

faculty and staff members will be approaching early retirement age, if established at 55 years old, within the next 10 years. This would provide the District with an alternative to reduce payroll expenses and reassess personnel needs.

12. Conduct a study to determine the necessity for a District policy requiring a specific number of related work experience hours in business/industry to update their skills. The faculty members related work experience is extremely important to their effectiveness in preparing students with employable job skills.
13. Develop a cooperative articulation plan that would provide selected businesses/industries and Gateway the opportunity to assess their prospective employees for skills, knowledges, training, student work experience or internship, and sharing technical assistance.
14. Offer technical assistance and training materials from Gateway to improve companies effectiveness in their employees by the on-the-job training method.
15. Develop a specific promotional campaign to recruit students from businesses and industries that expressed the need for supervisory training.

16. Start creative approaches for program delivery toward providing certificates of completion for short-term programs that are potential feeders to diploma or associate degree programs.
17. Utilize facility in the late afternoon with lab assistants and instructional packages for specific skill development to provide selected businesses/industries an opportunity to send employees for specific training.
18. Establish a level of yearly spending for instructional equipment purchases which is imperative to remain current. In addition, conduct preventive maintenance of equipment due to the increased student usage and the need to retain equipment for longer periods of time.

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APPENDIX A

PANEL OF EXPERTS

PANEL OF EXPERTS

Administrators

Keith Stoehr, District Director

Rolland Graf, Deputy District Director

Kenneth Mills, Director of Instructional Services and Research and Planning Services

Faculty

Jean Brennan, Student Services, Counselor

Jeanette Campbell, Instructional Services, Instructor

Thomas Krimmel, Student Services, Recruiter

John Mazurek, Instructional Services, Instructor

Jerry Perona, Instructional Services, Learning Resource Center

Paul Pham, Instructional Services, Instructor

APPENDIX B

BUSINESS AND INDUSTRY SURVEY

FACULTY AND STAFF SURVEY

TEST SAMPLES

BUSINESS AND INDUSTRY SURVEY
TEST SAMPLE

Businesses

J. C. Penney's
Kenosha Memorial Hospital
Korndoerfer Construction Company
State Bank of Elkhorn
Wisconsin Natural Gas Company

Industries

Motor Speciality, Incorporated
Moxness Products
Racine Steel Castings
Rexnord-Hydraulic Components Division
Twin Disc, Incorporated

FACULTY AND STAFF SURVEY
TEST SAMPLE

Jack Banerdt
Hugh Braun
Leonard Klappauf
Leo Nevala
Ralph Troeller

APPENDIX C HAS BEEN DELETED DUE TO IRREPRODUCIBILITY

APPENDIX C

BUSINESS AND INDUSTRY SURVEY

FACULTY AND STAFF SURVEY

COVER LETTERS

APPENDIX D

FACULTY AND STAFF

SURVEY INSTRUMENT

Gateway Technical Institute

FACULTY-STAFF SURVEY

The purpose of this survey is to determine how Gateway Technical Institute can utilize its resources at an optimum level during periods of shifting or declining enrollment.

Classifying Data

1. I work in the following department:

   (a) _____ Administrative Services
   (b) _____ Community Services
   (c) _____ Instructional Services
   (d) _____ Student Services
   (e) _____ Research and Planning Services

2. Your sex is:

   (a) _____ Male
   (b) _____ Female

3. Check (x) your title or position held:

   (a) _____ Supervisor
   (b) _____ Coordinator
   (c) _____ Instruction
   (d) _____ Support Staff

4. Check (x) your age range:

   (a) _____ 20-30
   (b) _____ 31-40
   (c) _____ 41-50
   (d) _____ 51-60
   (e) _____ Over 60

5. Check (x) your years of teaching/administrative experience:

   Total years:

   (a) _____ 1-5
   (b) _____ 6-10
   (c) _____ 11-15
   (d) _____ 16-20
   (e) _____ 21-25
   (f) _____ 26-30
   (g) _____ 31-35
   (h) _____ Over 35

   Check (x) years employed at GTI:

   (a) _____ 1-5
   (b) _____ 6-10
   (c) _____ 11-15
   (d) _____ 16-20
   (e) _____ 21-25
   (f) _____ 26-30
   (g) _____ 31-35
   (h) _____ Over 35

6. Describe your related work experience:

   _____

   _____

   _____

7. Year of graduation for degree(s):

   ___ BA/BS ___ MA/MS/M.Ed ___ Ed.S ___ Ph.D/Ed.D

8. Check (x) your extended education/professional development since beginning employment at GTI:

   (a) _____ Additional graduate courses
   (b) _____ Inservice workshops
   (c) _____ Conferences and seminars
   (d) _____ Additional field/work experience
   (e) _____ Travel related to area of employment
   (f) _____ Higher degree completed

(over please)

9. Identify specific program(s) that you consider should be consolidated or eliminated:

_____

_____

10. Please rate by circling the following items according to your interpretation of importance of this statement: GTI should perform the following items in order to maintain the high quality educational programs.

1 = SD = Strongly Disagree
2 = D = Disagree
3 = U = Uncertain
4 = A = Agree
5 = SA = Strongly Agree

		Responses				
		SD	D	U	A	SA
(a)	Need to carefully review new program development District-wide	1	2	3	4	5
(b)	Need facility expansion to accommodate program(s)	1	2	3	4	5
(c)	Improve present facility utilization	1	2	3	4	5
(d)	Reduction of the number of jobouts of the various programs	1	2	3	4	5
(e)	Increase faculty contact with employers	1	2	3	4	5
(f)	Utilize faculty members as representatives for the District in recruitment programs	1	2	3	4	5
(g)	Educate faculty in ways of helping handicapped students in regular courses	1	2	3	4	5
(h)	Assist faculty in learning methods to provide for individual needs of lower level/limited ability students	1	2	3	4	5
(i)	Offer new and existing programs in different ways	1	2	3	4	5
(j)	Eliminate low enrollment programs	1	2	3	4	5
(k)	Increase use of faculty when providing inservice instruction to business/industry, either on campus or at business site	1	2	3	4	5
(l)	Improve GTI's image with the public	1	2	3	4	5

11. In the order of importance rank (1, 2, 3, etc.) the action to be taken in response to the problem of reduced enrollments at GTI:

(a) _____ Reduce assignments for all present full-time instructors, with reduced pay spread over all instructors affected.

(b) _____ Maintain full-time assignments, but eliminate positions whenever required by reduced enrollments.

(c) _____ Consider moving to another district where position may exist.

(d) _____ Consider working as part-time instructor with balance of work week devoted to work in related business/industry.

(e) _____ Other _____

12. Please respond with your suggestions to the following questions:

(a) How can present existing laboratories and classrooms be more effectively used?

_____

_____

(b) How can the faculty be better utilized to recruit students? Be specific:

_____

_____

(c) What can be done to improve student retention in the District? Be specific.

_____

_____

(d) How can GTI improve in its relationship with business/industry? Be specific.

_____

_____

(e) Please give any other suggestions which you may have that can improve the utilization of the District's resources, i.e., faculty and staff, facilities, etc.

_____

_____

APPENDIX E

BUSINESS AND INDUSTRY

SURVEY INSTRUMENT

Gateway Technical Institute

BUSINESS AND INDUSTRY SURVEY

The purpose of this survey by Gateway Technical Institute is two-fold in nature:

1. To determine the current practices of business and industry in providing organized training programs for employees.

2. To gather recommendations that can aid the District in developing future programs to meet business and industry training needs.

Your assistance in completing the questionnaire as completely as possible will require only a few minutes and will make a valuable contribution to the informational data requested by the District as it strives to provide for the needs of the community.

Classifying Data

1. Firm name _____

2. Address _____

3. Name of person reporting _____

4. Job title _____

5. Please check (x) the descriptions which best identify the activities of your firm:

(a) ___ Agricultural services
(b) ___ Advertising
(c) ___ Banking and finance
(d) ___ Communications
(e) ___ Construction
(f) ___ Education
(g) ___ Entertainment and recreation
(h) ___ Food, dairy and drink
(i) ___ Government-federal, state and local
(j) ___ Health-hospital, medical, dental
(k) ___ Hotel/motel
(l) ___ Industrial/manufacturing
(m) ___ Insurance
(n) ___ Marine services
(o) ___ Printing
(p) ___ Professional-other than medical services
(q) ___ Real estate
(r) ___ Retailing-other than food, dairy and drink
(s) ___ Service establishment
(t) ___ Transportation
(u) ___ Utilities
(v) ___ Wholesaling
(w) ___ _____
(x) ___ _____

6. Check (x) the number of full-time employees in your organization:

(a) ___ 0-50
(b) ___ 51-100
(c) ___ 101-500
(d) ___ 501-1000
(e) ___ 1001-2000
(f) ___ 2001-5000
(g) ___ Over 5000

7. Company training effort:

(a) How many employees are responsible for training or who share this responsibility with other duties? ____

(over please)

7. Company training effort: (cont.)

(b) Check (x) the type of training performed:

(1) ___ Inservice seminars
(2) ___ On-the-job training
(3) ___ Mini-courses

(c) Check (x) the type(s) of program(s) your company now operates on a formal basis:

(1) ___ Apprenticeship
(2) ___ Supervisory training
(3) ___ Technician training
(4) ___ Plant management
(5) ___ Job upgrading
(6) ___ Executive development
(7) ___ Other _____
(8) ___ _____
(9) ___ _____

(d) Reason for internal training:

(1) ___ Unique product
(2) ___ Skill development
(3) ___ Convenience
(4) ___ Management development

(e) With the assistance of GTI, which of the following training program(s) would you consider continuing or implementing?

(1) ___ Apprenticeship
(2) ___ Supervisory training
(3) ___ Technician training
(4) ___ Plant management
(5) ___ Job upgrading
(6) ___ Executive development
(7) ___ Other _____
(8) ___ _____
(9) ___ _____

(f) Check (x) the following source(s) that have provided training for your company:

(1) ___ GTI
(2) ___ UW-Parkside
(3) ___ Carthage College
(4) ___ UW-Whitewater
(5) ___ Business management course
(6) ___ Retail Manufacturing Assn.
(7) ___ Other _____
_____

(g) Does your company offer a Tuition Reimbursement Policy?

(1) ___ Yes (2) ___ No

(h) How many employees used the tuition benefit in 1978?

(1) ___ 0-5
(2) ___ 6-10
(3) ___ 11-25
(4) ___ 26-50
(5) ___ 51-100
(6) ___ Over 100

(i) If employees are enrolled in training courses, check (x) the method your company employs to accommodate them?

(1) ___ Release time from job to attend external education centers
(2) ___ Shared release time between company and employee
(3) ___ Provide internal courses on company time
(4) ___ Expect employee to get training after work hours and at own expense

8. How can Gateway Technical Institute more effectively aid business and industry in providing more meaningful training programs?

(a) ___ Provide business and industries with technical information upon request relating to instructional program content

(b) ___ Have a school coordinator visit periodically to discuss training needs

(c) ___ Have a company training representative available as a resource person to review programs in your speciality

(d) ___ Have a training specialist from your company serve on an occupational advisory committee

(e) ___ Allow selected students to take part in cooperative training programs

(f) ___ Have vocational-technical instructors work part time in business/industry in order to keep current on technological skills and concerns of business.

(g) ___ Other _____

_____

_____

_____

9. During the 1980's, do you anticipate any changes in the total work hours per week. Please comment.

_____

_____

10. Has your company or business given any consideration to methods such as flex-time or task assignment for determining employee work weeks? Please comment.

_____

_____

11. What is your assessment of the job skills/training level of entering employees. Please comment.

_____

_____

12. In what way can the educational facilities of GTI meet the occupational training? Please comment.

_____

_____

SIGNATURE PAGE

I certify that I have read and am willing to sponsor this Major Applied Research Project submitted by NICHOLAS J. COVELLI. In my opinion it conforms to acceptable standards and is fully adequate in scope and quality, as a Major Applied Research Project for the degree of Doctor of Education at Nova University.

10-9-79
(date)

Ivan E. Valentine

Ivan E. Valentine, MARP Advisor

I certify that I have read this Major Applied Research Project and in my opinion it conforms to acceptable standards for a Major Applied Research Project for the degree of Doctor of Education at Nova University.

OCTOBER 5, 1979
(date)

Dr Spiro Mehail

Spiro Mehail, Local Professional

This Major Applied Research Project was submitted to the Central Staff of the Nova University Ed.D. Program for Vocational, Technical and Occupational Education and is acceptable as partial fulfillment of the requirements for the degree of Doctor of Education.

11/14/79
(date)

Eugene E Du Bois

Eugene E. Du Bois
Central Staff Committee Member

AUG 22 1980

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